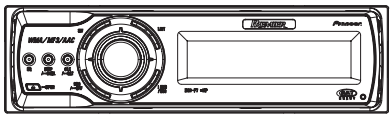
Pioneer *sound.vision.soul*

Service Manual



DEH-P780MP/XN/UC

ORDER NO.
CRT3649

MULTI-CD CONTROL DSP HIGH POWER CD/MP3/WMA/AAC PLAYER WITH FM/AM TUNER

DEH-P780MP/XN/UC
DEH-P7800MP/XN/UC
DEH-P8850MP/XN/ES

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3164	CRT3583	S10.5COMP1	CD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly

For details, refer to "Important Check Points for Good Servicing".

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ⓒ**PIONEER CORPORATION 2006**

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SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

● **Safety Precautions for those who Service this Unit.**

- **When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:

1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

● **Service Precaution**

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.
2. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
3. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY".
4. After replacing the pickup unit, be sure to check the grating.
5. Be careful in handling ICs. Some ICs such as MOS type are so fragile that they can be damaged by electrostatic induction.

COMPACT disc DIGITAL AUDIO

COMPACT disc DIGITAL AUDIO TEXT

Plays Windows Media™

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SPECIFICATIONS

● DEH-P780MP/XN/UC

General

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Backup current ..... 6.5 mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 161 mm (7 × 2 × 6-3/8 in.)
Nose ..... 188 × 58 × 23 mm (7-3/8 × 2-1/4 × 7/8 in.)
D
Chassis ..... 178 × 50 × 166 mm (7 × 2 × 6-1/2 in.)
Nose ..... 170 × 45 × 18 mm (6-3/4 × 1-3/4 × 3/4 in.)
Weight ..... 1.7 kg (3.7 lbs)

Audio/DSP

Maximum power output ..... 50 W × 4
Continuous power output ... 22 W × 4 (50 Hz to 15 000 Hz, 5% THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout max output level/output impedance 5 V/100Ω
Loudness contour ..... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (16-Band Graphic Equalizer):
Frequency ..... 20/31.5/50/80/125/200/315/500/800/1.25k/2k/3.15k/5k/8k/12.5k/20k Hz
Equalization range ..... ±12 dB
HPF (Front/rear):
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... 0 (Pass)/–6/–12 dB/oct
Gain ..... 0 dB to –24 dB/Mute
Subwoofer:
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... –6/–12/–18 dB/oct
Gain ..... +6 dB to –24 dB/Mute
Phase ..... Normal/Reverse

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format:
Sampling frequency ..... 44.1 kHz
Number of quantization bits ..... 16; linear
Frequency characteristics ... 5 Hz to 20 000 Hz (±1 dB)
Signal-to-noise ratio ..... 100 dB (1 kHz) (IHF-A network)
Dynamic range ..... 95 dB (1 kHz)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes® encoded only)
WAV signal format ..... Linear PCM & MS ADPCM

FM tuner

Frequency range ..... 87.9 MHz to 107.9 MHz
Usable sensitivity ..... 8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio ..... 75 dB (IHF-A network)
Distortion ..... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ..... 30 Hz to 15 000 Hz (±3 dB)
Stereo separation ..... 45 dB (at 65 dBf, 1 kHz)
Selectivity ..... 80 dB (±200 kHz)
Three-signal intermodulation (desired signal level) ..... 30 dBf (two undesired signal level: 100 dBf)

AM tuner

Frequency range ..... 530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Signal-to-noise ratio ..... 65 dB (IHF-A network)

Note

Specifications and the design are subject to possible modifications without notice due to improvements. ■

● **DEH-P7800MP/XN/UC**

General

Power source ..... 14.4 V DC (10.8 V to 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Backup current ..... 6.5 mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 161 mm (7 × 2 × 6-3/8 in.)
Nose ..... 188 × 58 × 23 mm (7-3/8 × 2-1/4 × 7/8 in.)
D
Chassis ..... 178 × 50 × 166 mm (7 × 2 × 6-1/2 in.)
Nose ..... 170 × 45 × 18 mm (6-3/4 × 1-3/4 × 3/4 in.)
Weight ..... 1.7 kg (3.7 lbs)

Audio/DSP

Maximum power output ..... 50 W × 4
Continuous power output ... 22 W × 4 (50 Hz to 15 000 Hz, 5% THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout max output level/output impedance 5 V/100Ω
Loudness contour ..... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (16-Band Graphic Equalizer):
Frequency ..... 20/31.5/50/80/125/200/315/500/800/1.25k/2k/3.15k/5k/8k/12.5k/20k Hz
Equalization range ..... ±12 dB
HPF (Front/rear):
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... 0 (Pass)/–6/–12 dB/oct
Gain ..... 0 dB to –24 dB/Mute
Subwoofer:
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... –6/–12/–18 dB/oct
Gain ..... +6 dB to –24 dB/Mute
Phase ..... Normal/Reverse

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format:
Sampling frequency ..... 44.1 kHz
Number of quantization bits ..... 16; linear
Frequency characteristics ... 5 Hz to 20 000 Hz (±1 dB)
Signal-to-noise ratio ..... 100 dB (1 kHz) (IHF-A network)
Dynamic range ..... 95 dB (1 kHz)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes® encoded only)
WAV signal format ..... Linear PCM & MS ADPCM

FM tuner

Frequency range ..... 87.9 MHz to 107.9 MHz
Usable sensitivity ..... 8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio ..... 75 dB (IHF-A network)
Distortion ..... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ..... 30 Hz to 15 000 Hz (±3 dB)
Stereo separation ..... 45 dB (at 65 dBf, 1 kHz)
Selectivity ..... 80 dB (±200 kHz)
Three-signal intermodulation (desired signal level) ..... 30 dBf (two undesired signal level: 100 dBf)

AM tuner

Frequency range ..... 530 kHz to 1 710 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Signal-to-noise ratio ..... 65 dB (IHF-A network)

Note

Specifications and the design are subject to possible modifications without notice due to improvements. ▣

● **DEH-P8850MP/XN/ES**

General

Rated power source ..... 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Backup current ..... 6.5 mA or less
Dimensions (W × H × D):
DIN
Chassis ..... 178 × 50 × 161 mm
Nose ..... 188 × 58 × 23 mm
D
Chassis ..... 178 × 50 × 166 mm
Nose ..... 170 × 45 × 18 mm
Weight ..... 1.7 kg

Audio/DSP

Maximum power output ..... 50 W × 4
Continuous power output ... 22 W × 4 (50 Hz to 15 000 Hz, 5% THD, 4 Ω load, both channels driven)
Load impedance ..... 4 Ω (4 Ω to 8 Ω allowable)
Preout max output level/output impedance 5 V/100Ω
Loudness contour ..... +10 dB (100 Hz), +6.5 dB (10 kHz) (volume: –30 dB)
Equalizer (16-Band Graphic Equalizer):
Frequency ..... 20/31.5/50/80/125/200/315/500/800/1.25k/2k/3.15k/5k/8k/12.5k/20k Hz
Equalization range ..... ±12 dB
Auto equalizer:
(Front & rear & subwoofer 16 band graphic)
Frequency ..... 20/31.5/50/80/125/200/315/500/800/1.25k/2k/3.15k/5k/8k/12.5k/20k Hz
Equalization range ..... +6 dB to –12 dB
HPF (Front/rear):
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... 0 (Pass)/–6/–12 dB/oct
Gain ..... 0 dB to –24 dB/Mute
Subwoofer:
Frequency ..... 50/63/80/100/125/160/200 Hz
Slope ..... –6/–12/–18 dB/oct
Gain ..... +6 dB to –24 dB/Mute
Phase ..... Normal/Reverse

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format:
Sampling frequency ..... 44.1 kHz
Number of quantization bits ..... 16; linear
Frequency characteristics ... 5 Hz to 20 000 Hz (±1 dB)
Signal-to-noise ratio ..... 100 dB (1 kHz) (IEC-A network)
Dynamic range ..... 95 dB (1 kHz)
Number of channels ..... 2 (stereo)
MP3 decoding format ..... MPEG-1 & 2 Audio Layer 3
WMA decoding format ..... Ver. 7, 7.1, 8, 9, 10 (2ch audio) (Windows Media Player)
AAC decoding format ..... MPEG-4 AAC (iTunes® encoded only)
WAV signal format ..... Linear PCM & MS ADPCM

FM tuner

Frequency range ..... 87.5 MHz to 108.0 MHz
Usable sensitivity ..... 8 dBf (0.7 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 10 dBf (0.9 μV/75 Ω, mono)
Signal-to-noise ratio ..... 75 dB (IEC-A network)
Distortion ..... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response ..... 30 Hz to 15 000 Hz (±3 dB)
Stereo separation ..... 45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range ..... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Signal-to-noise ratio ..... 65 dB (IEC-A network)

Infrared remote control

Wavelength ..... 940 nm ±50 nm
Output ..... typ; 12 mw/sr per Infrared LED

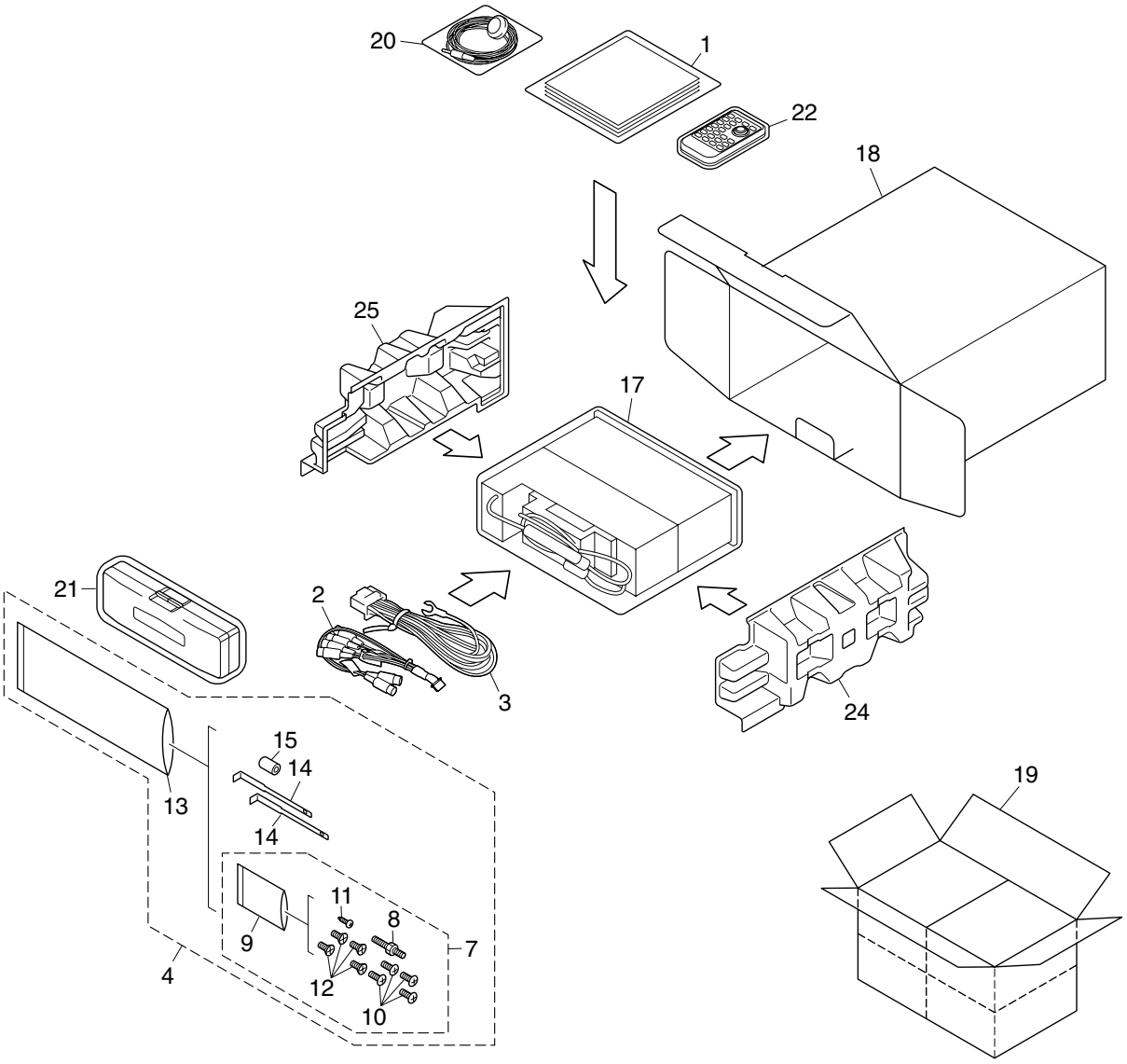
Note

Specifications and the design are subject to possible modifications without notice due to improvements.

2. EXPLODED VIEWS AND PARTS LIST

*NOTES : • Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
• The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
• Screw adjacent to▽mark on the product are used for disassembly.
• For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)

2.1 PACKING



(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
*	1-1	Card	See Contrast table(2)
	1-2	Polyethylene Bag	CEG1116
	1-3	Owner's Manual	See Contrast table(2)
	1-4	Owner's Manual	See Contrast table(2)
	1-5	Owner's Manual	See Contrast table(2)
	1-6	Installation Manual	See Contrast table(2)
*	1-7	Waranty Card	See Contrast table(2)
*	1-8	Caution Card	CRP1310
*	1-9	Caution Card	XRP7002
	2	Cord Assy	CDE8284
	3	Cord Assy	CDE7701
	4	Accessory Assy	See Contrast table(2)
	5	•••••	
	6	•••••	
	7	Screw Assy	See Contrast table(2)
	8	Screw	CBA1650
*	9	Polyethylene Bag	CEG-127
	10	Screw	CRZ50P090FTC
	11	Screw	See Contrast table(2)
	12	Screw	TRZ50P080FTC
*	13	Polyethylene Bag	CEG-158
	14	Handle	CNC5395
	15	Bush	CNV3930
	16	•••••	
	17	Polyethylene Bag	See Contrast table(2)
	18	Carton	See Contrast table(2)
	19	Contain Box	See Contrast table(2)
	20	Microphone Assy	See Contrast table(2)
	21	Case Assy	XXA7417
	22	Remote Control Unit	CXC5717
	23	•••••	
	24	Protector	XHP7008
	25	Protector	XHP7007

(2) CONTRAST TABLE

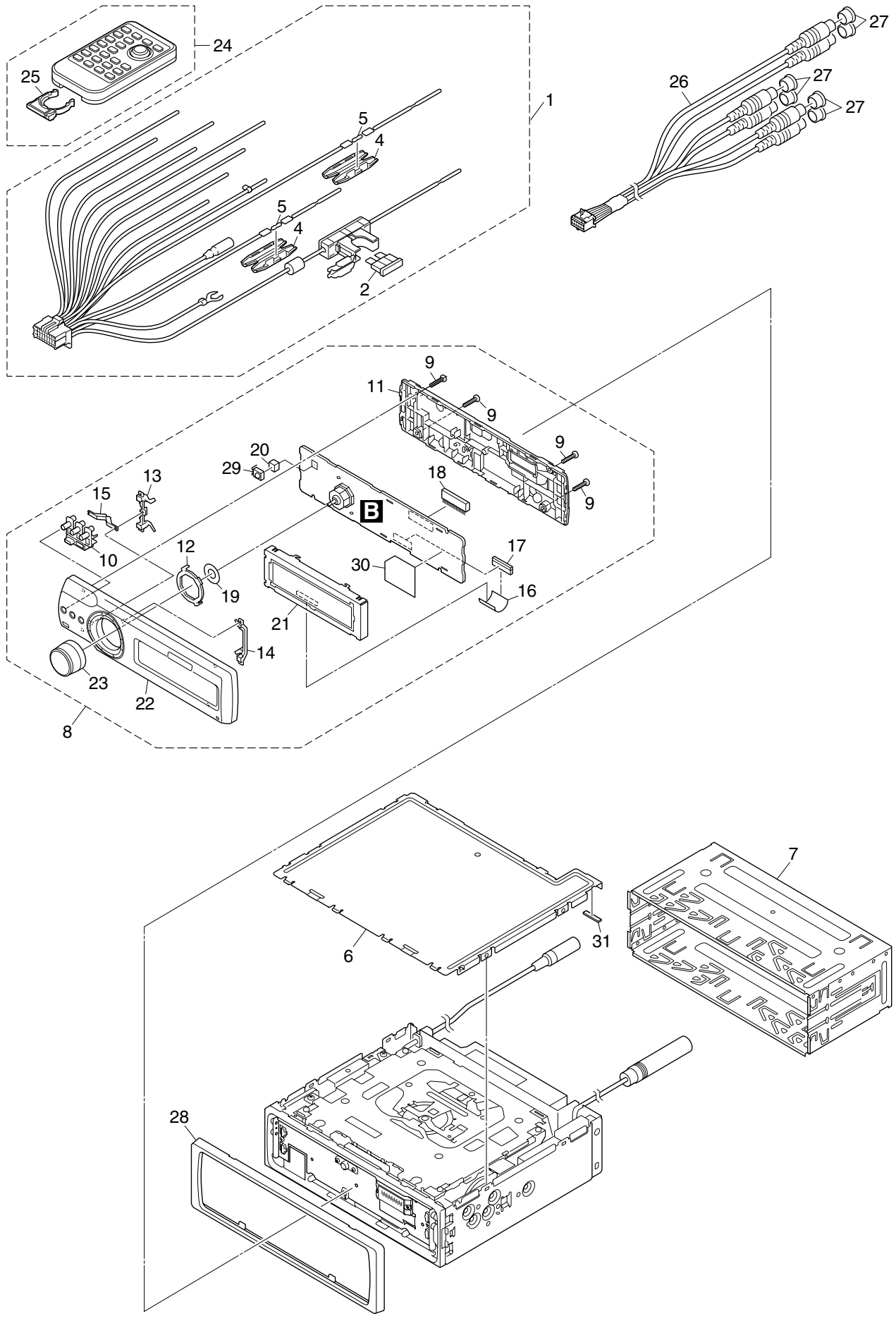
DEH-P780MP/XN/UC, DEH-P7800MP/XN/UC and DEH-P8850MP/XN/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P780MP/XN/UC	DEH-P7800MP/XN/UC	DEH-P8850MP/XN/ES
*	1-1	Card	Not used	ARY1048	Not used
	1-3	Owner's Manual	CRD4085	CRD4087	CRB2247
	1-4	Owner's Manual	Not used	Not used	CRD4089
	1-5	Owner's Manual	Not used	Not used	CRD4090
	1-6	Installation Manual	CRD4086	CRD4088	CRD4091
*	1-7	Waranty Card	CRY1070	CRY1246	Not used
	4	Accessory Assy	CEA6351	CEA6351	CEA6400
	7	Screw Assy	CEA5322	CEA5322	CEA3849
	11	Screw	JPZ20P060FTB	JPZ20P060FTB	Not used
	17	Polyethylene Bag	CEG1173	CEG1173	CEG-162
	18	Carton	CHG5753	CHG5752	CHG5748
	19	Contain Box	CHL5753	CHL5752	CHL5748
	20	Microphone Assy	Not used	Not used	CPM1054

Owner's Manual,Installation Manual

Part No.	Language
CRD4085	English, French
CRD4086	English, French
CRD4087	English, French
CRD4088	English, French
CRB2247	Traditional Chinese
CRD4089	English, Spanish
CRD4090	Portuguese(B), Arabic
CRD4091	English, Spanish, Portuguese(B), Arabic, Traditional Chinese

2.2 EXTERIOR(1)



(1) EXTERIOR(1) SECTION PARTS LIST

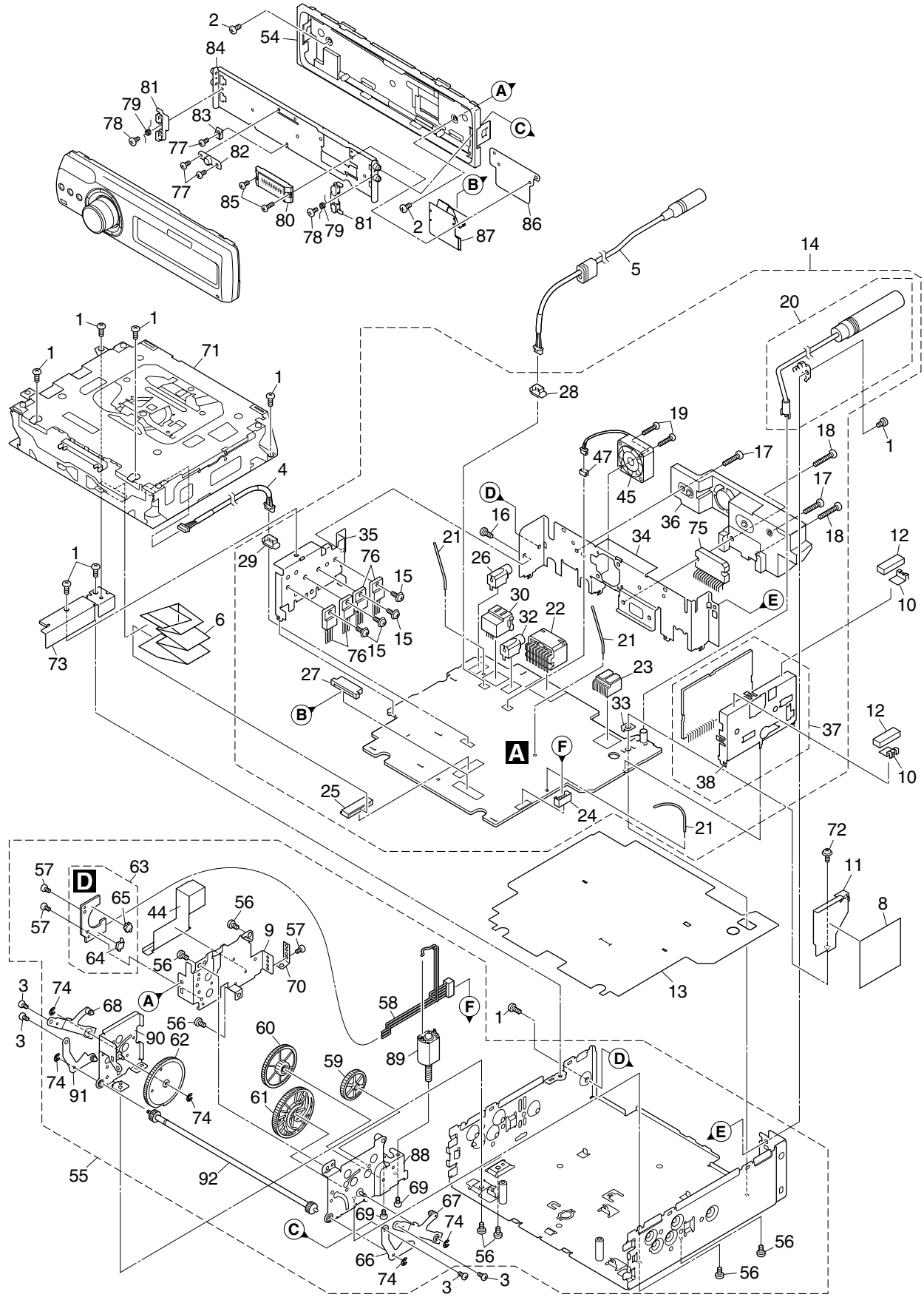
Mark	No.	Description	Part No.
	1	Cord Assy	CDE7701
⚠	2	Fuse(10 A)	CEK1136
	3	•••••	
	4	Cap	CNS1472
	5	Resistor	RS1/2PMF102J
	6	Case Assy	CXC6907
	7	Holder	CNC8659
	8	Detach Grille Assy	See Contrast table(2)
	9	Screw	BPZ20P080FTB
	10	Button (EQ, DISP, CLOCK)	CAC9527
	11	Cover	CNS8491
	12	Holder	CNV8834
	13	Lighting Conductor	CNV9010
	14	Lighting Conductor	CNV9011
	15	Lighting Conductor	CNV9013
	16	Cable	CDE8057
	17	Connector(CN1931)	CKS5090
	18	Connector(CN1701)	CKS5662
	19	Sheet	CNM8658
	20	Cushion	CNM9946
	21	OEL Module	MXK8230
	22	Grille Unit	See Contrast table(2)
	23	Knob Unit(MULTI-CONTROL)	CXC5674
	24	Remote Control Unit	CXC5717
	25	Cover	CZN5357
	26	Cord Assy	CDE8284
	27	Cap	CNV6727
	28	Panel	XNS7145
	29	IC (IC1801)	GP1UX51RK
	30	Insulator	CNN1327
	31	Cushion	CNN1405

(2) CONTRAST TABLE

DEH-P780MP/XN/UC, DEH-P7800MP/XN/UC and DEH-P8850MP/XN/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P780MP/XN/UC	DEH-P7800MP/XN/UC	DEH-P8850MP/XN/ES
	8	Detach Grille Assy	CXC6069	CXC6070	CXC5596
	22	Grille Unit	CXC6173	CXC6174	CXC5605

2.3 EXTERIOR(2)



(1) EXTERIOR(2) SECTION PARTS LIST

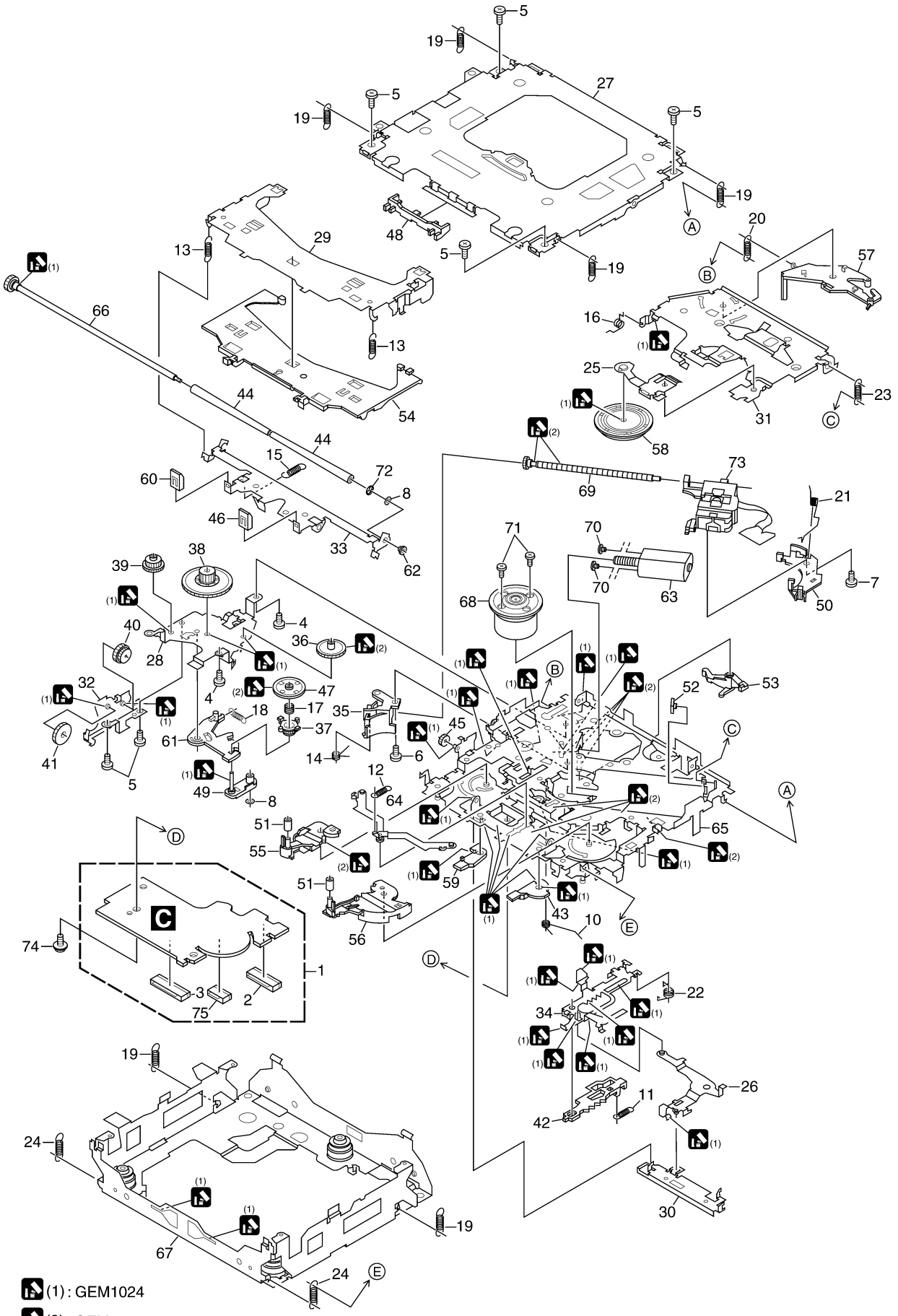
Mark	No.	Description	Part No.
	1	Screw	BSZ26P060FTC
	2	Screw(M2.6 x 4)	CBA1828
	3	Screw(M2 x 2.5)	CBA1924
	4	Cord Assy	CDE8315
	5	Cord Assy	See Contrast table(2)
	6	Cable	CDE8067
	7	•••••	
	8	Insulator	CNN1406
	9	Holder	XNC7017
	10	Earth Plate	CND2171
	11	Shield	CND3599
	12	Cushion	CNM9126
	13	Insulator	CNM9936
	14	Tuner Amp Unit	See Contrast table(2)
	15	Screw	ASZ26P060FTC
	16	Screw	BMZ26P040FTC
	17	Screw	BMZ26P120FTC
	18	Screw	BMZ26P180FTC
	19	Screw(M2.6 x 14)	CBA1632
	20	Antenna Cable	CDH1336
	21	Clamper	CEF1050
	22	Plug(CN991)	CKM1278
	23	Connector(CN321)	CKM1389
	24	Plug(CN801)	CKS-786
	25	Connector(CN701)	CKS3834
	26	Connector(CN671)	See Contrast table(2)
	27	Connector(CN811)	CKS4811
	28	Connector(CN431)	See Contrast table(2)
	29	Connector(CN702)	CKS4824
	30	Connector(CN101)	CKS5271
	31	•••••	
	32	Connector(CN441)	CKS5523
	33	Holder(CN402)	CNC5399
	34	Holder	See Contrast table(2)
	35	Holder	CND3133
	36	Heat Sink	CNR1869
	37	FM/AM Tuner Unit	CWE1952
	38	Holder	CND1054
	39	•••••	
	40	•••••	
	41	•••••	
	42	•••••	
	43	•••••	
	44	Insulator	XNM7119
	45	Fan Motor (M972)	CXM1288
	46	•••••	
	47	ZH Connector 2P (CN971)	VKN1928
	48	•••••	
	49	•••••	
	50	•••••	
	51	•••••	
	52	•••••	
	53	•••••	
	54	Panel Unit	XXA7408
	55	Drive Unit	CXC6618
	56	Screw	BMZ26P040FTC
	57	Screw(M2 x 2)	CBA1871
	58	Cord	CDE7392
	59	Gear	CNV7752
	60	Gear	CNV7753
	61	Gear	CNV7754
	62	Gear	CNV7755
	63	Switch Unit	CWS1389
	64	Switch(S1)	CSN1051
	65	Switch(S2)	CSN1052
	66	Arm Unit	CXC2199
	67	Arm Unit	CXC6623
	68	Arm Unit	CXC6624
	69	Screw	JFZ20P020FTC
	70	Spring	XBL7003
	71	CD Mechanism Module (S10.5)	CXK5754
	72	Screw	ISS26P055FTC
	73	Holder	CND3606
	74	Washer	YE15FTC
	75	IC (IC351)	PAL007B
	76	Transistor (Q721,901, 911, 921)	2SD2396
	77	Screw(M2 x 2)	CBA1871
	78	Screw(M2 x 2)	CBA1935
	79	Spring	CBH2530
	80	Connector	CKS5273
	81	Arm	CNV6962
	82	Guide	CNV6967
	83	Guide	CNV8048
	84	Case Unit	CXC6483
	85	Screw(M2 x 3.5)	XBA7002
	86	Holder	XNC7019
	87	Flexible PCB	XNP7026
	88	Holder Unit	XXA7399
	89	Motor Unit(M801)	XXA7400
	90	Holder Unit	XXA7401
	91	Arm Unit	XXA7403
	92	Gear Unit	XXA7424

(2) CONTRAST TABLE

DEH-P780MP/XN/UC, DEH-P7800MP/XN/UC and DEH-P8850MP/XN/ES are constructed the same except for the following:

Mark	No.	Description	DEH-P780MP/XN/UC	DEH-P7800MP/XN/UC	DEH-P8850MP/XN/ES
	5	Cord Assy	Not used	Not used	CDE8062
	14	Tuner Amp Unit	CWN1757	CWN1758	CWN1439
	26	Connector(CN671)	CKS4124	CKS4124	Not used
	28	Connector(CN431)	Not used	Not used	CKS4823
	34	Holder	CND3129	CND3129	CND3161

2.4 CD MECHANISM MODULE

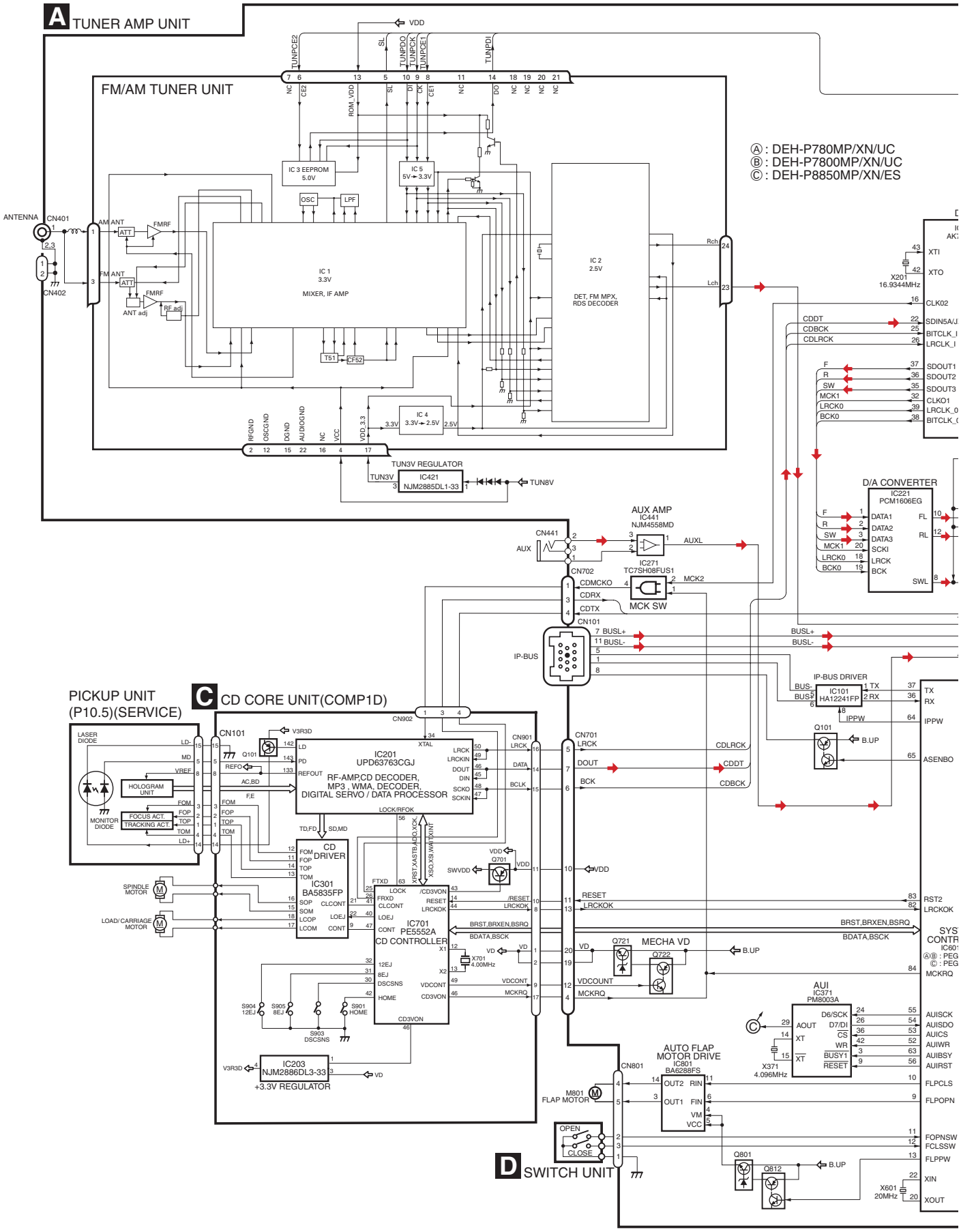


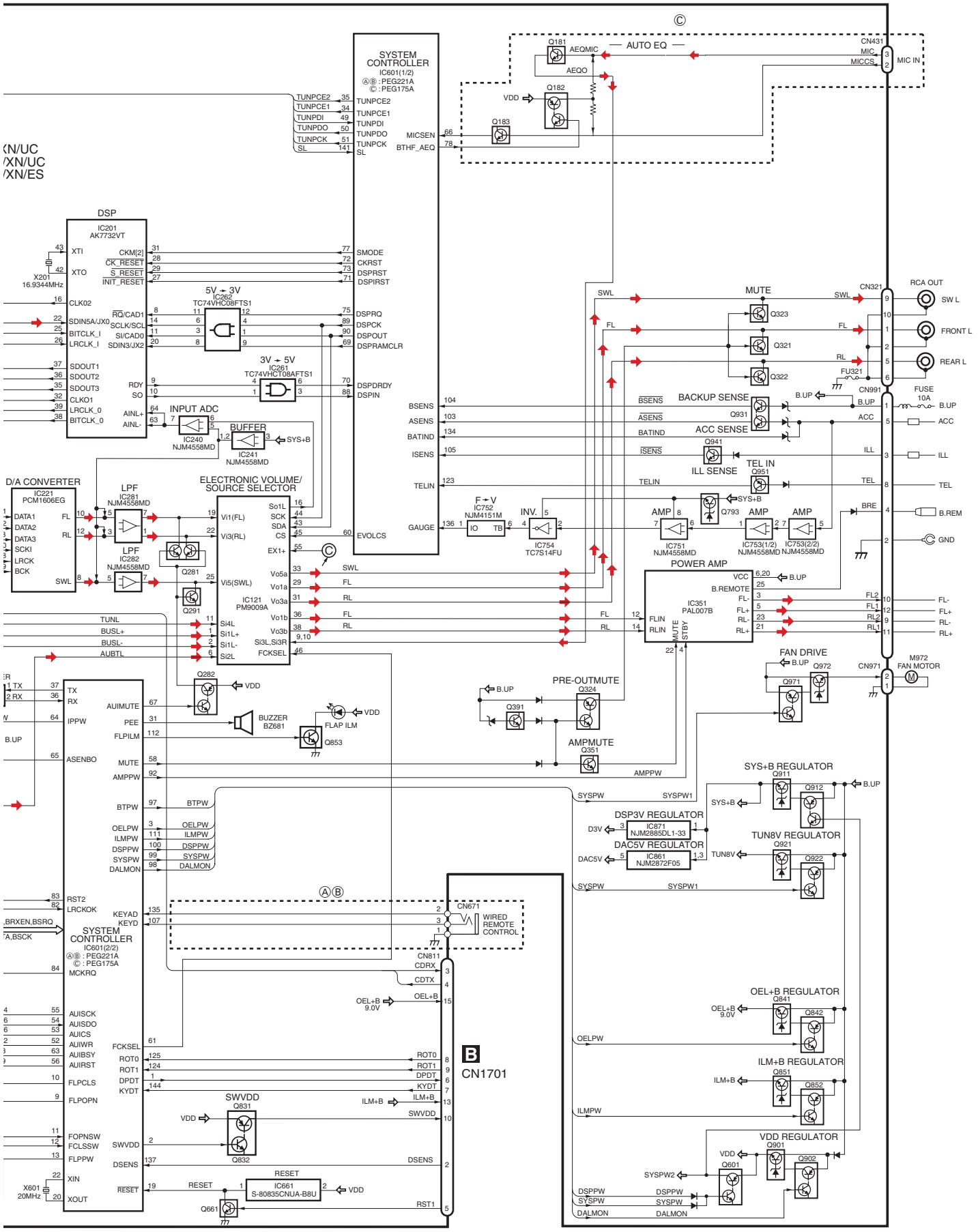
CD MECHANISM MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	CD Core Unit(COMP1D)	CWX3328
	2	Connector(CN101)	CKS4182
	3	Connector(CN901)	CKS4187
	4	Screw	BMZ20P025FTC
	5	Screw	BSZ20P040FTC
	6	Screw(M2 x 3)	CBA1511
	7	Screw(M2 x 4)	CBA1835
	8	Washer	CBF1038
	9	•••••	
	10	Spring	CBH2609
	11	Spring	CBH2612
	12	Spring	CBH2614
	13	Spring	CBH2616
	14	Spring	CBH2617
	15	Spring	CBH2620
	16	Spring	CBH2855
	17	Spring	CBH2937
	18	Spring	CBH2735
	19	Spring	CBH2854
	20	Spring	CBH2642
	21	Spring	CBH2856
	22	Spring	CBH2857
	23	Spring	CBH2860
	24	Spring	CBH2861
	25	Spring	CBL1686
	26	Arm	CND1909
	27	Frame	CND2582
	28	Bracket	CND2583
	29	Arm	CND2584
	30	Lever	CND2585
	31	Arm	CND2586
	32	Bracket	CND2587
	33	Arm	CND2588
	34	Lever	CND2589
	35	Holder	CNV7201
	36	Gear	CNV7207
	37	Gear	CNV7208
	38	Gear	CNV7209
	39	Gear	CNV7210
	40	Gear	CNV7211
	41	Gear	CNV7212
	42	Rack	CNV7214
	43	Arm	CNV7216
	44	Roller	CNV7218
	45	Gear	CNV7219
	46	Guide	CNV7361
	47	Gear	CNV7595
	48	Guide	CNV7799
	49	Arm	CNV7805
	50	Rack	CNV8342
	51	Roller	CNV8343
	52	Holder	CNV8344
	53	Arm	CNV8345
	54	Guide	CNV8347
	55	Arm	CNV8348
	56	Arm	CNV8349
	57	Arm	CNV8350
	58	Clamper	CNV8365
	59	Arm	CNV8386
	60	Guide	CNV8396
	61	Arm	CNV8413
	62	Collar	CNV8938
	63	Motor Unit(M2)	CXC4026
	64	Arm Unit	CXC4027
	65	Chassis Unit	CXC4028
	66	Gear Unit	CXC4029
	67	Frame Unit	CXC4031
	68	Motor Unit(M1)	CXC6742
	69	Screw Unit	CXC6359
	70	Screw	JFZ20P020FTC
	71	Screw	JGZ17P022FTC
	72	Washer	YE20FTC
	73	Pickup Unit(P10.5)(Service)	CXX1942
	74	Screw	IMS26P030FTC
	75	Connector(CN902)	CKS4979

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM




SYSTEM CONTROLLER
IC601(1/2)
Ⓐ⒝ : PEG221A
Ⓒ : PEG175A
DSP
IC201
AK7732VT
AUTO EQ
Q181
AEQMIC
AEQO
Q182
Q183
CN431
MIC
MICCS
MIC IN
MICSEN
BTHF_AEQ
SMODE
CKRST
DSPRST
DSPIRST
DSPRQ
DSPCK
DSPOUT
DSPRAMCLR
DSPDRDY
DSPIN
BSENS
ASENS
BATIND
ISENS
TELIN
GAUGE
EVOLCS
X201
16.9344MHz
5V → 3V
IC262
TC74VHC08FTS1
3V → 5V
IC261
TC74VHCT08AFTS1
INPUT ADC
IC240
NJM4558MD
BUFFER
IC241
NJM4558MD
SYS+B
MUTE
Q323
Q321
Q322
BACKUP SENSE
Q931
ACC SENSE
Q941
ILL SENSE
TEL IN
Q951
F → V
IC752
NJM4151M
INV.
IC754
TC7S14FU
AMP
IC751
NJM4558MD
IC753(1/2)
NJM4558MD
IC753(2/2)
NJM4558MD
Q793
POWER AMP
IC351
PAL007B
FLIN
RLIN
MUTE
STBY
VCC
B.REMOTE
FL-
FL+
RL-
RL+
CN321
RCA OUT
SW L
FRONT L
REAR L
FU321
CN991
FUSE
10A
B.UP
ACC
ILL
TEL
BRE
B.REM
GND
CN971
M972
FAN MOTOR
FAN DRIVE
Q971
Q972
D/A CONVERTER
IC221
PCM1606EG
DATA1
DATA2
DATA3
SCKI
LRCK
BCK
LPF
IC281
NJM4558MD
IC282
NJM4558MD
ELECTRONIC VOLUME/
SOURCE SELECTOR
IC121
PM9009A
Vi1(FL)
Vi3(RL)
Vi5(SWL)
So1L
SCK
SDA
CS
EX1+
Vo5a
Vo1a
Vo3a
Vo1b
Vo3b
Si3L,Si3R
FCKSEL
Si4L
Si1L+
Si1L-
Si2L
TUNL
BUSL+
BUSL-
AUBTL
Q281
Q291
Q282
BUZZER
BZ681
FLAP ILM
Q853
PRE-OUTMUTE
Q324
Q391
AMPMUTE
Q351
AMPPW
SYS+B REGULATOR
Q911
Q912
SYSPW
SYSPW1
DSP3V REGULATOR
IC871
NJM2885DL1-33
D3V
DAC5V REGULATOR
IC861
NJM2872F05
DAC5V
TUN8V REGULATOR
Q921
Q922
TUN8V
OEL+B REGULATOR
Q841
Q842
OEL+B
9.0V
OELPW
ILM+B REGULATOR
Q851
Q852
ILM+B
ILMPW
VDD REGULATOR
Q901
Q902
Q601
SYSPW2
DSPPW
SYSPW
DALMON
SYSTEM CONTROLLER
IC601(2/2)
Ⓐ⒝ : PEG221A
Ⓒ : PEG175A
CN671
WIRED REMOTE CONTROL
CN811
CDRX
CDTX
OEL+B
ROT0
ROT1
DPDT
KYDT
ILM+B
SWVDD
DSENS
RESET
IC661
S-80835CNUA-B8U
Q661
X601
20MHz
RST1
SWVDD
Q831
Q832
B
CN1701
DEH-P780MP/XN/UC
17

A

B

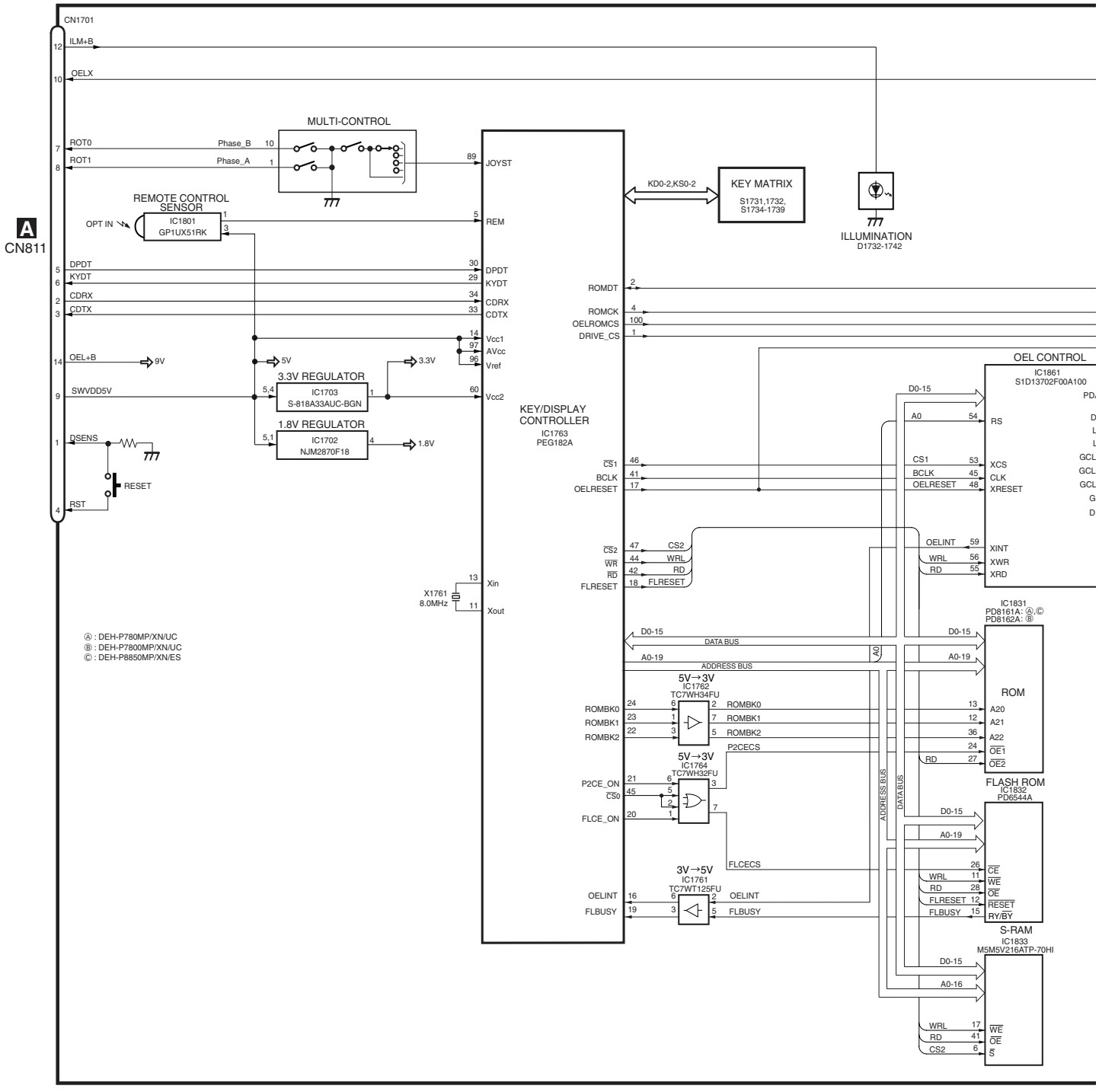
C

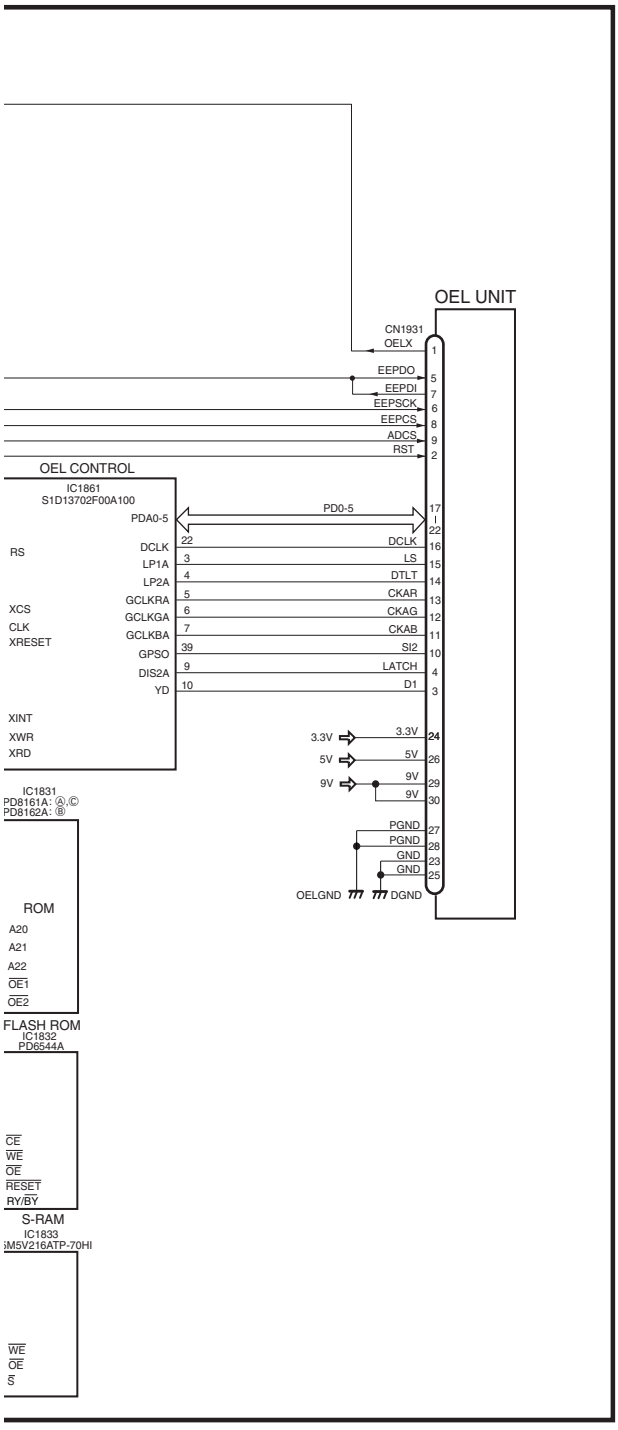
D

E

F

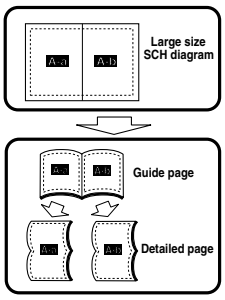
B KEYBOARD UNIT




OEL UNIT
CN1931
OELX
EEPDO
EEPDI
EEPSCK
EEPCS
ADCS
RST
OEL CONTROL
IC1861
S1D13702F00A100
PDA0-5
PD0-5
RS
DCLK
LP1A
LP2A
GCLKRA
GCLKGA
GCLKBA
GPSO
DIS2A
YD
XCS
CLK
XRESET
XINT
XWR
XRD
LS
DTLT
CKAR
CKAG
CKAB
SI2
LATCH
D1
3.3V
5V
9V
PGND
GND
OELGND
DGND
IC1831
PD8161A: Ⓐ,Ⓒ
PD8162A: Ⓑ
ROM
A20
A21
A22
OE1
OE2
FLASH ROM
IC1832
PD6544A
CE
WE
OE
RESET
RY/BY
S-RAM
IC1833
M5V216ATP-70HI
WE
OE
S

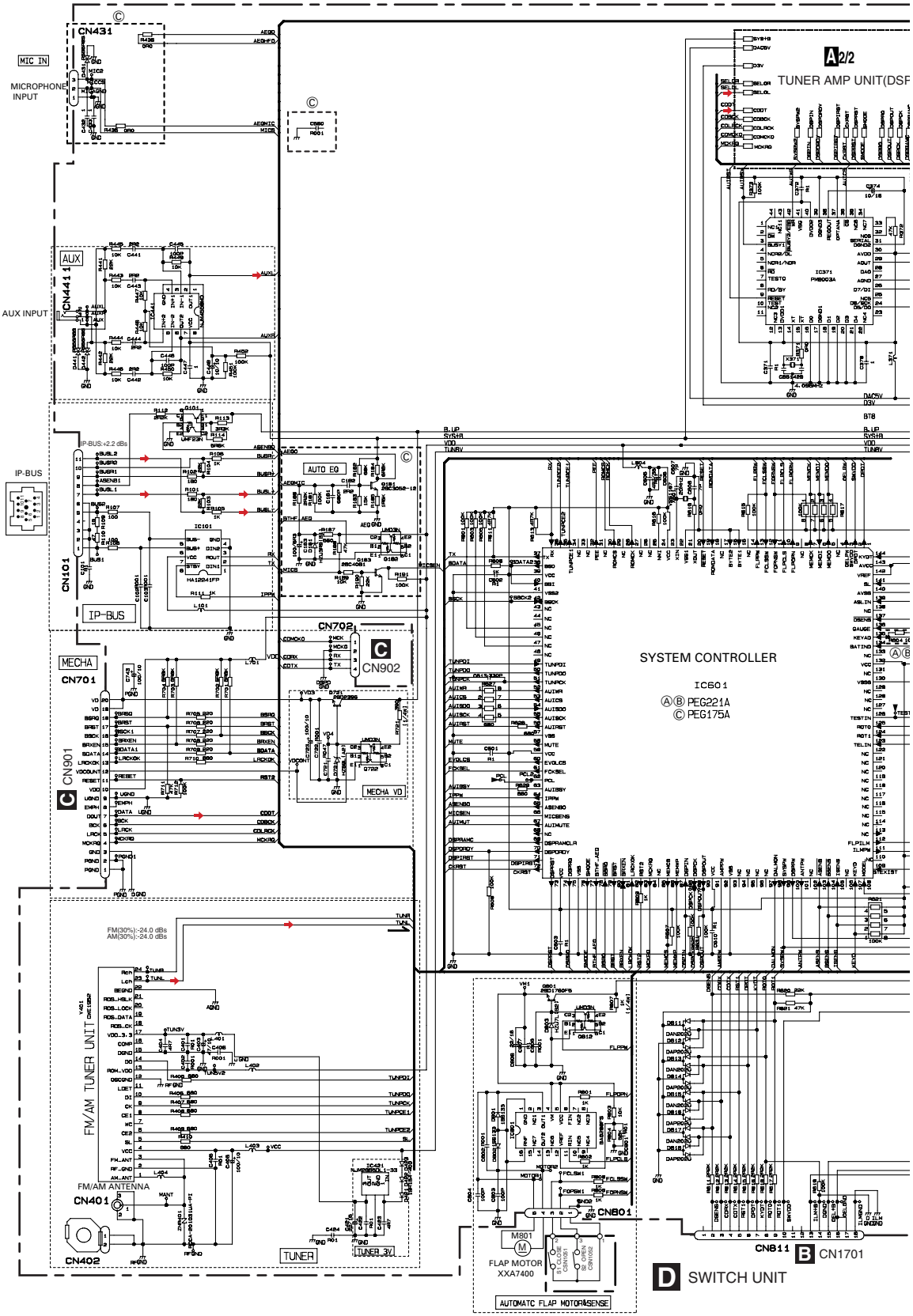
3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



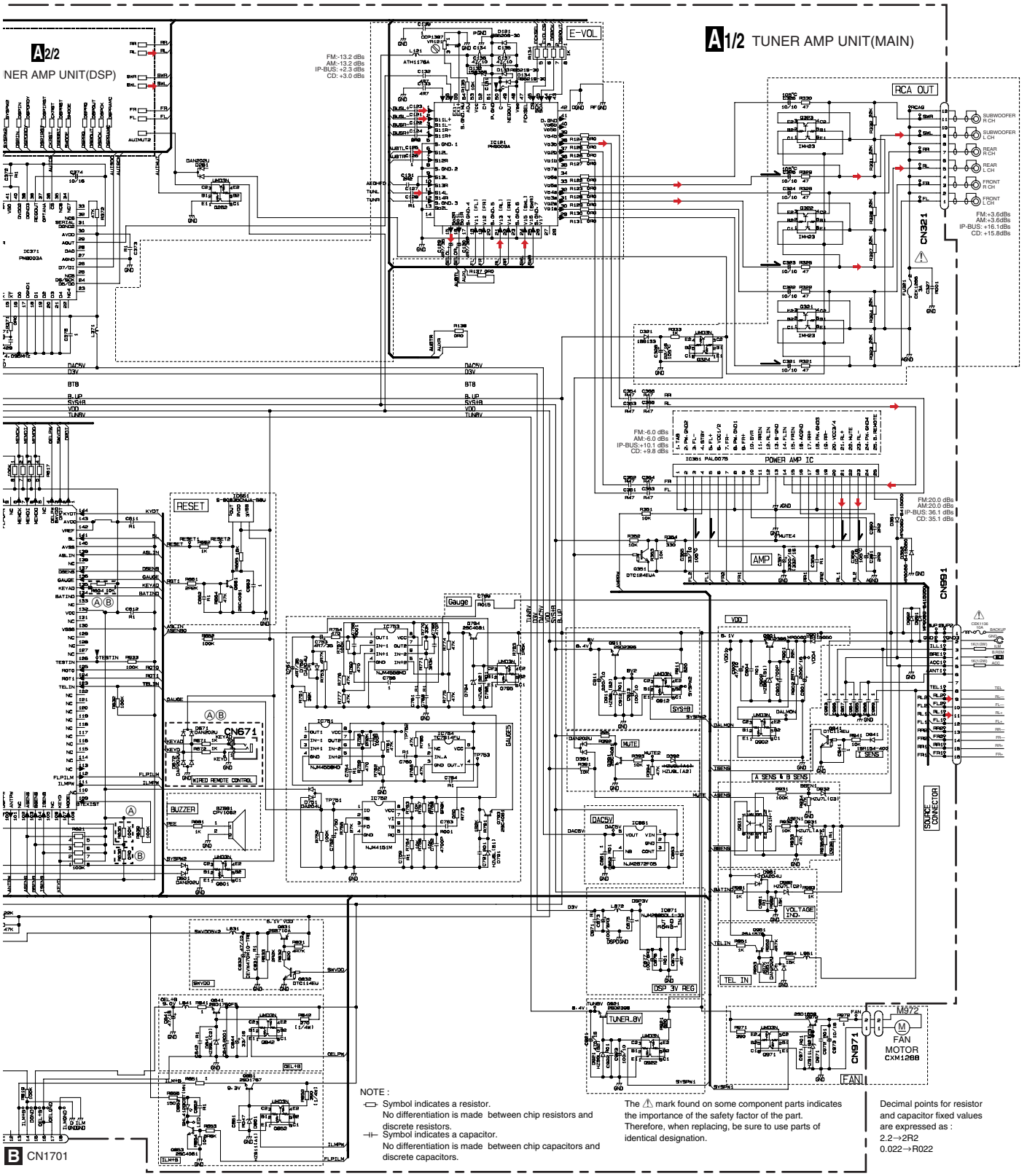
A-b 1/2

Ⓐ : DEH-P780MP/XN/UC
Ⓑ : DEH-P7800MP/XN/UC
Ⓒ : DEH-P8850MP/XN/ES



A1/2 D

A-b 1/2



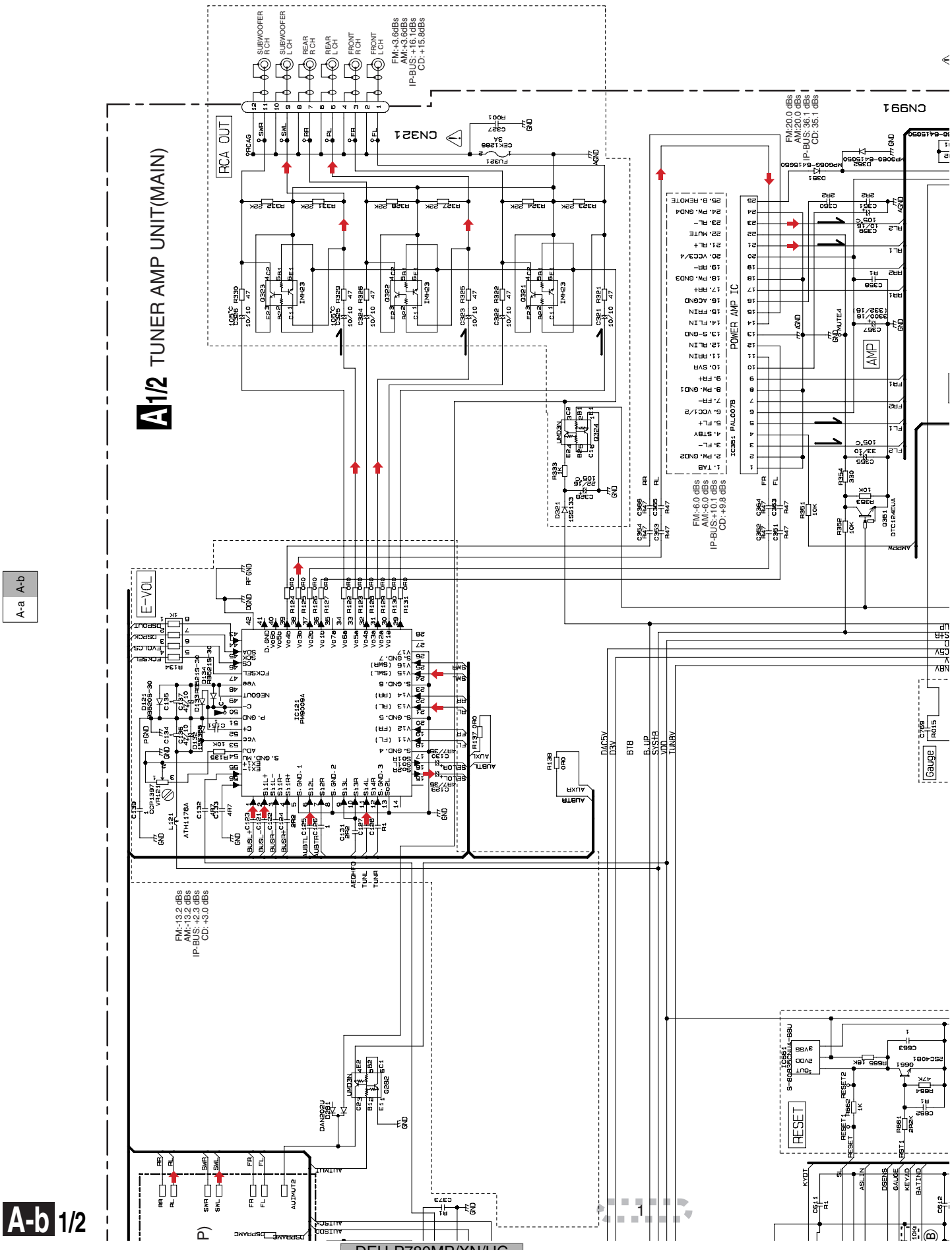
NOTE :

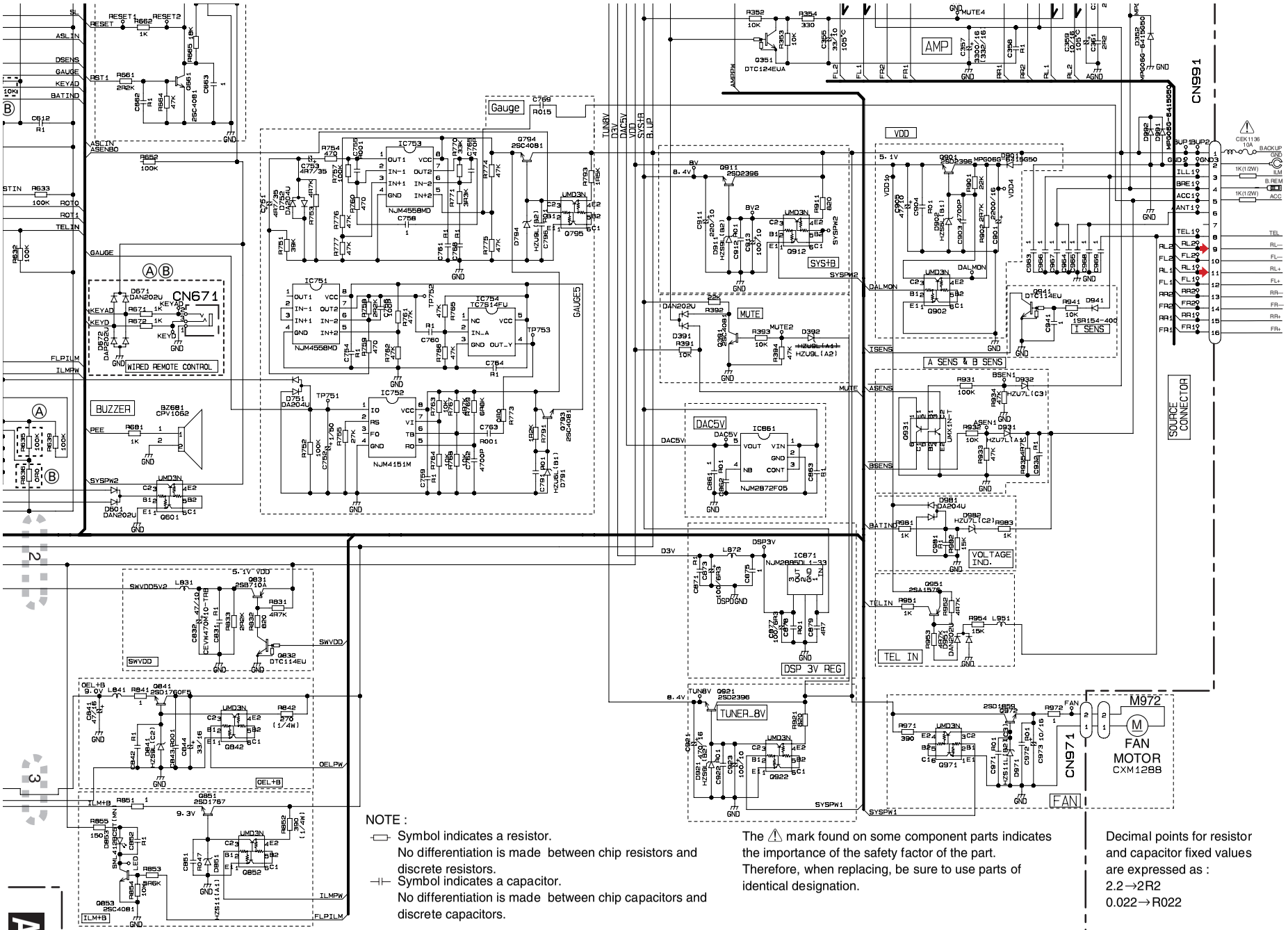
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

A1/2


A1/2 TUNER AMP UNIT(MAIN)
A-b 1/2
A-a A-b
CN321
CN991
RCA OUT
SUBWOOFER R CH
SUBWOOFER L CH
REAR R CH
REAR L CH
FRONT R CH
FRONT L CH
FM:+3.6dBs
AM:+3.6dBs
IP-BUS:+16.1dBs
CD:+15.8dBs
POWER AMP IC
IC361 PAL007B
AMP
E-VOL
IC121 PMG009A
RESET
Gauge
FM:-13.2 dBs
AM:-13.2 dBs
IP-BUS:+2.3 dBs
CD:+3.0 dBs
FM:-6.0 dBs
AM:-6.0 dBs
IP-BUS:+10.1 dBs
CD:+9.8 dBs
FM:20.0 dBs
AM:20.0 dBs
IP-BUS: 36.1 dBs
CD: 35.1 dBs



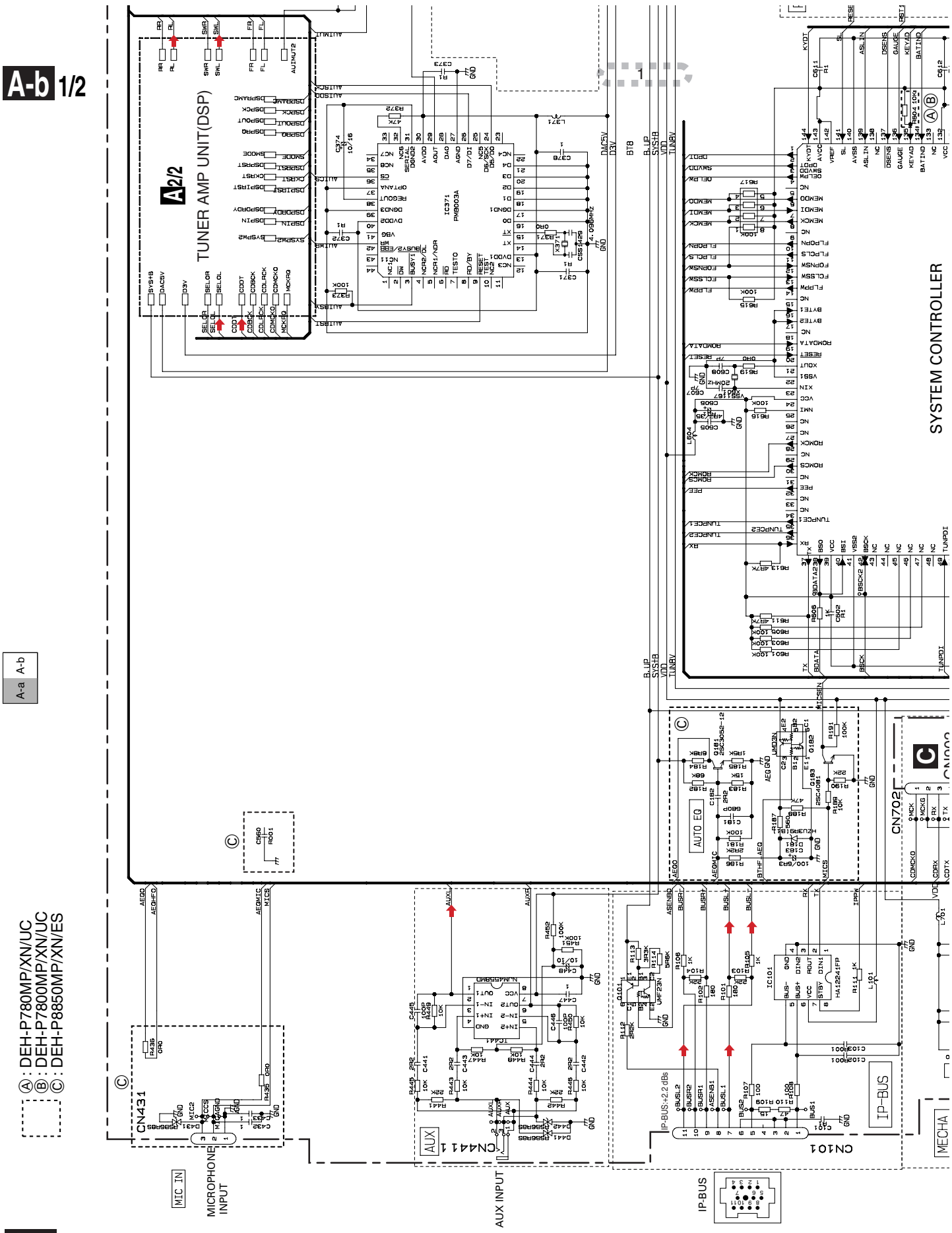
NOTE :

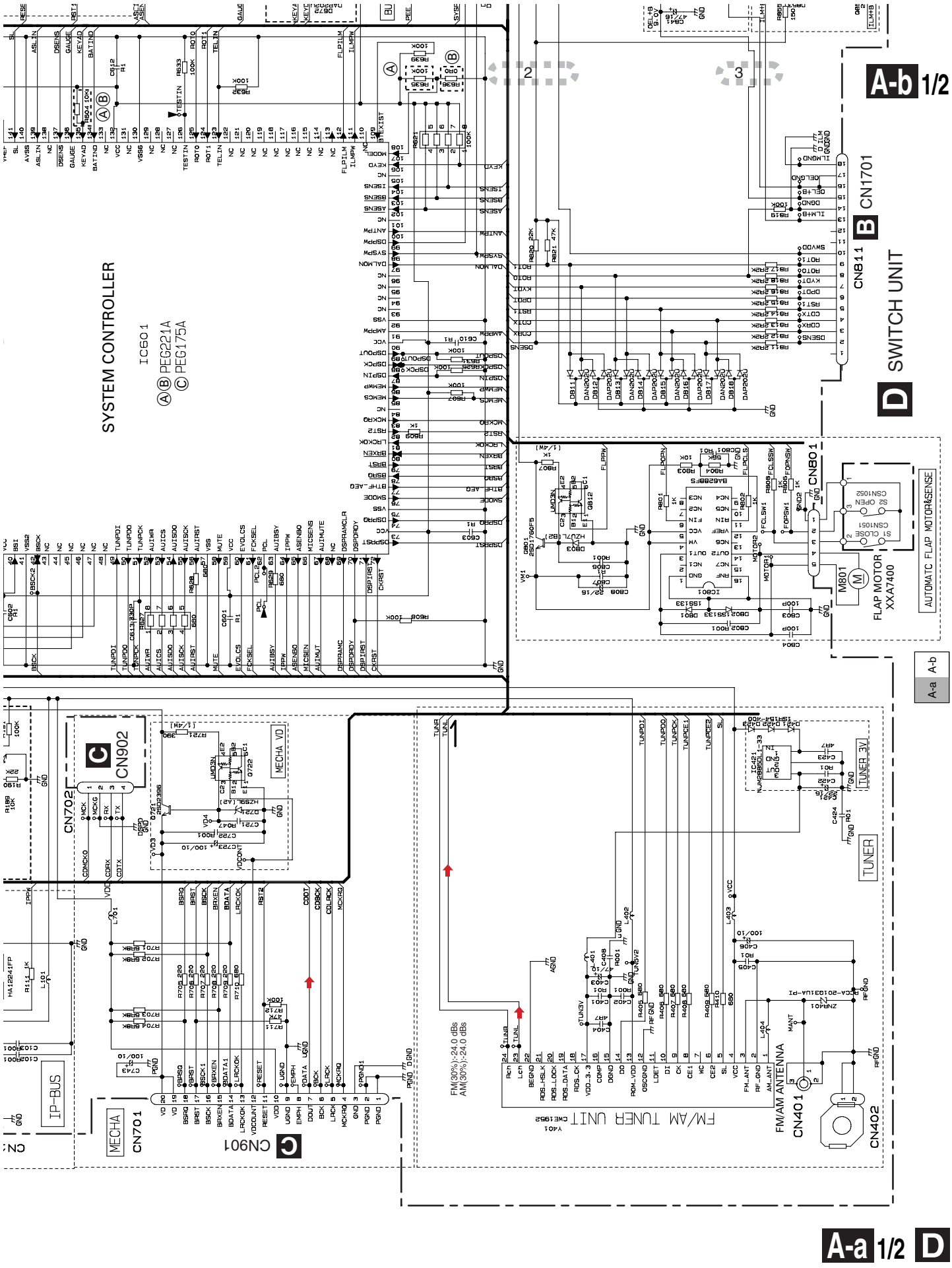
- Symbol indicates a resistor.
  No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor.
  No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

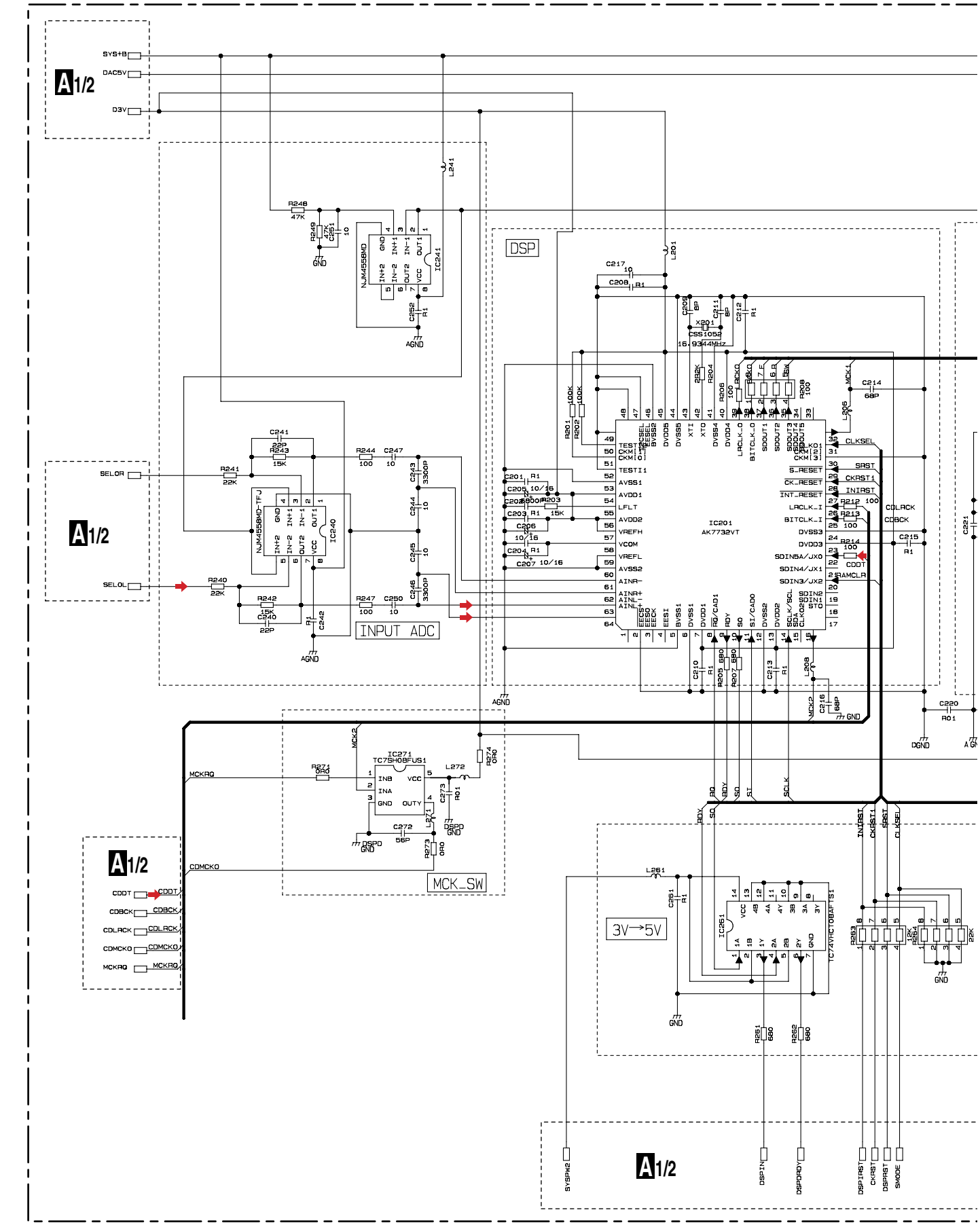
Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

A-a A-b

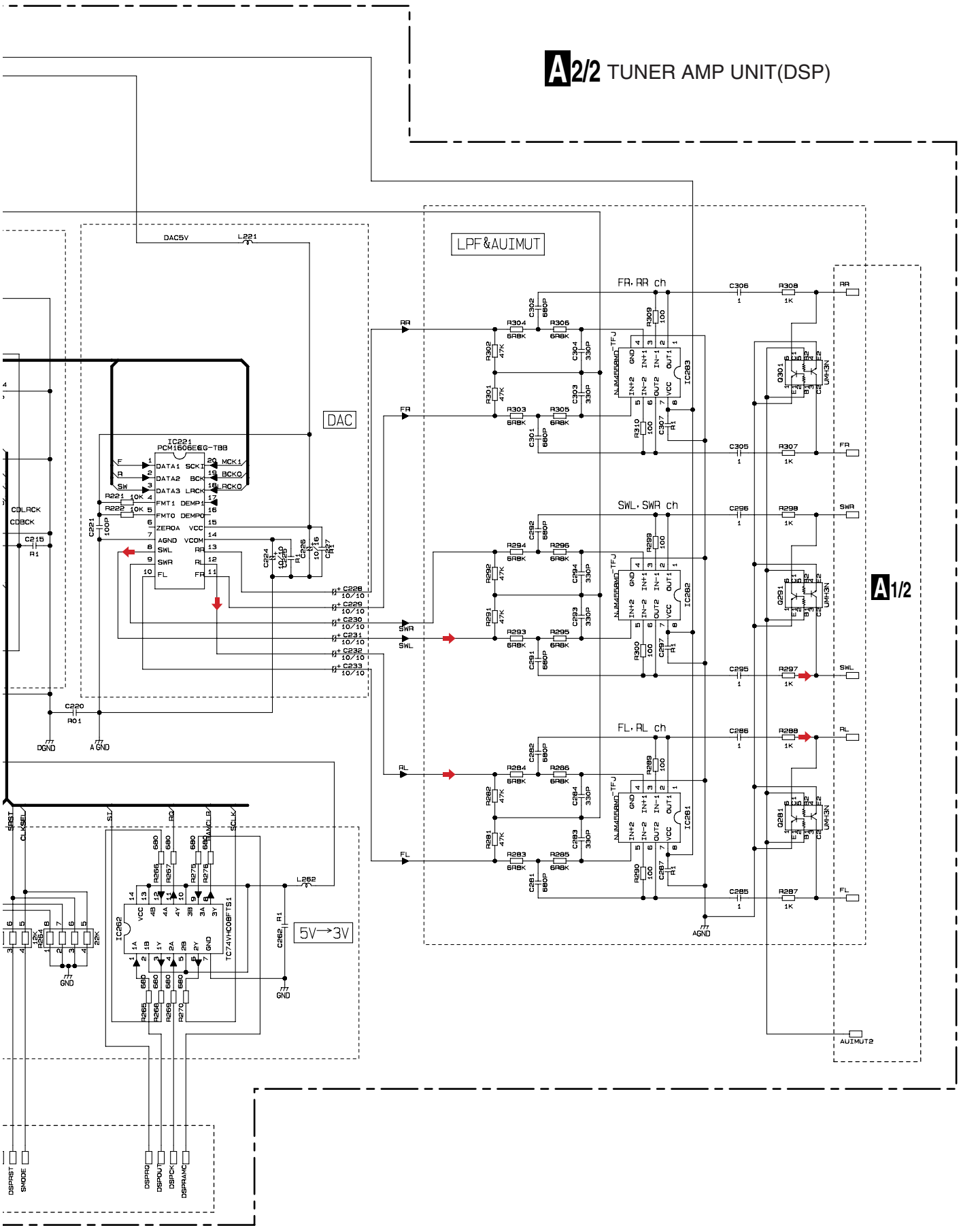

A-b 1/2
A-a 1/2
A-a A-b
Ⓐ : DEH-P780MP/XN/UC
Ⓑ : DEH-P7800MP/XN/UC
Ⓒ : DEH-P8850MP/XN/ES
A2/2
TUNER AMP UNIT(DSP)
SYSTEM CONTROLLER
AUTO EQ
IP-BUS
AUX
MECHA
CN431
CN441
CN101
CN702
MIC IN
MICROPHONE INPUT
AUX INPUT
IP-BUS


SYSTEM CONTROLLER
ICG01
Ⓐ Ⓑ PEG221A
Ⓒ PEG175A
A-b 1/2
B CN1701
CN811
D SWITCH UNIT
CNB01
AUTOMATIC FLAP MOTOR&SENSE
FLAP MOTOR
XXA7400
M801
A-b
A-a
C CN902
CN702
MECHA VD
TUNER 3V
TUNER
FM/AM TUNER UNIT
CWE1952
FM/AM ANTENNA
CN401
CN402
FM(30%):-24.0 dBs
AM(30%):-24.0 dBs
G CN901
IP-BUS
MECHA
CN701
A-a 1/2 D

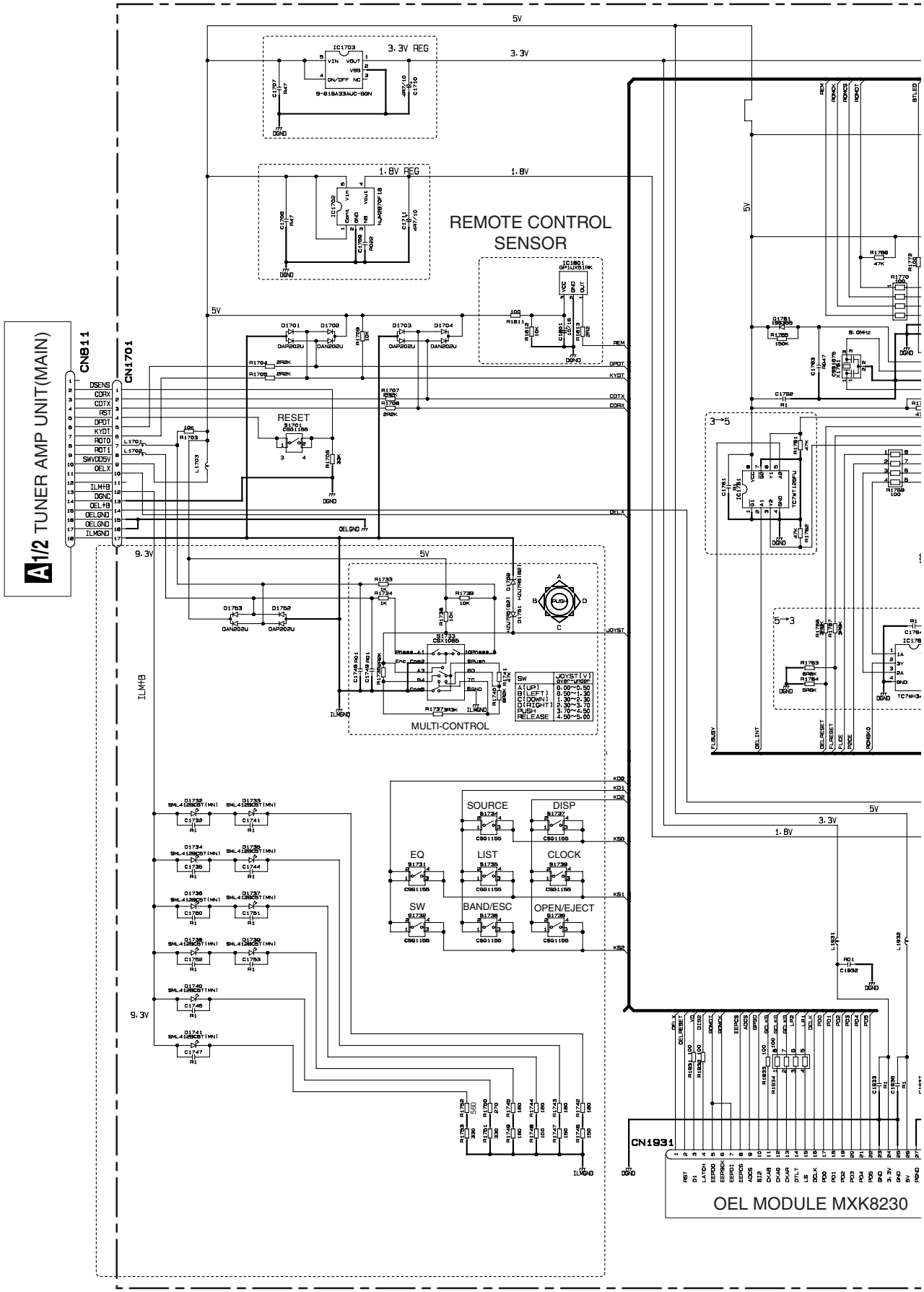
3.3 TUNER AMP UNIT(DSP)



A2/2 TUNER AMP UNIT(DSP)

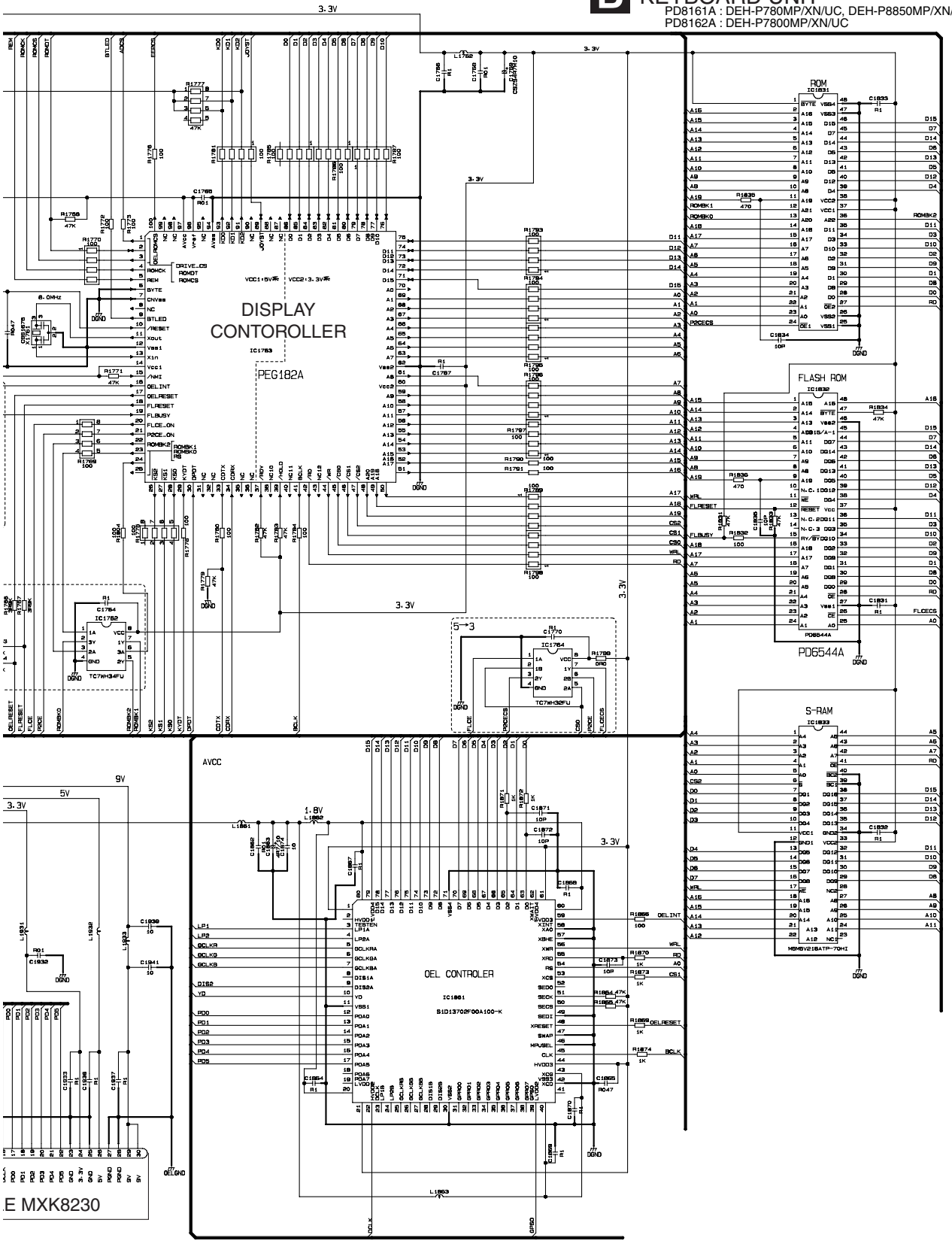


3.4 KEYBOARD UNIT

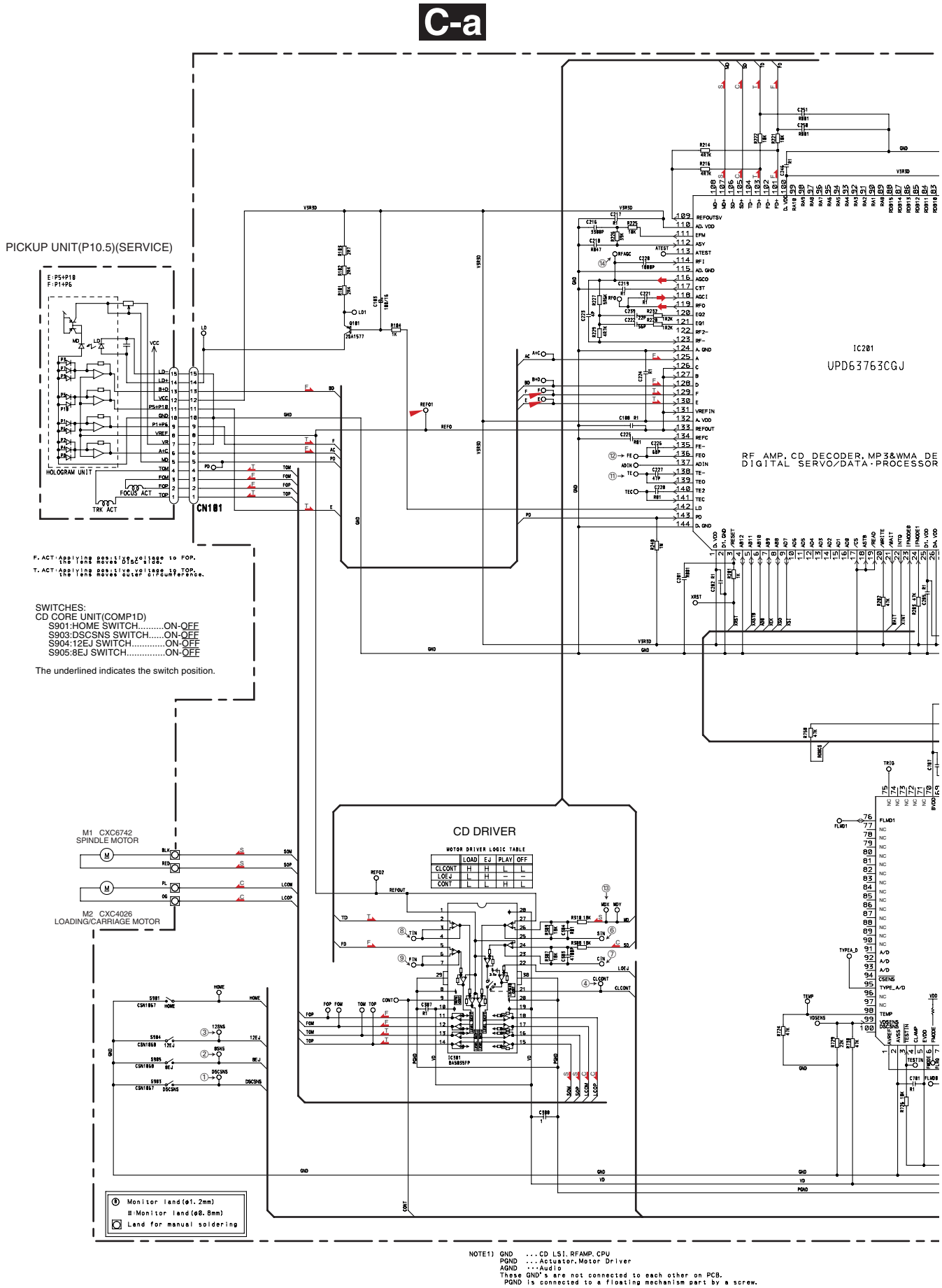


B KEYBOARD UNIT

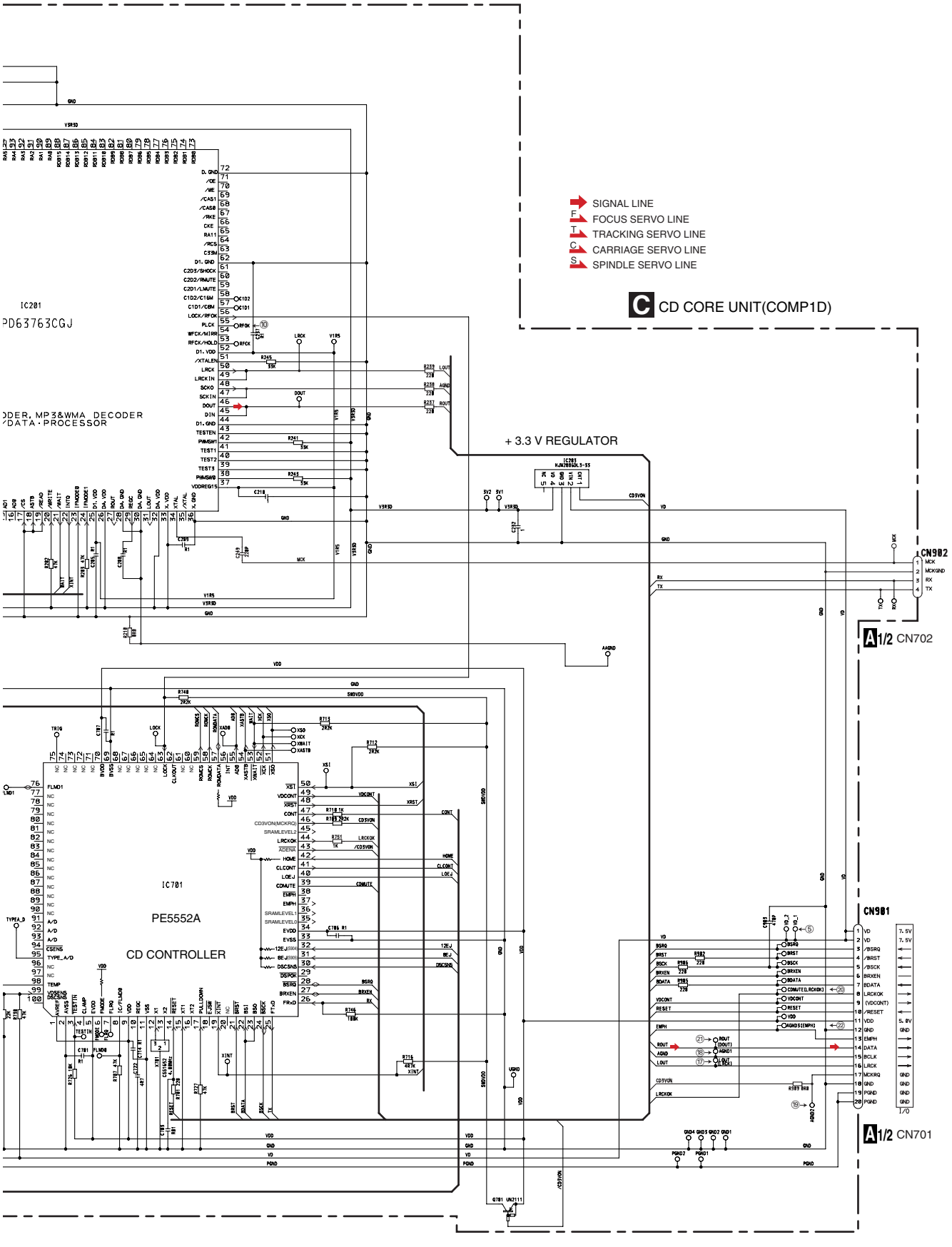
PD8161A : DEH-P780MP/XN/UC, DEH-P8850MP/XN/ES
PD8162A : DEH-P7800MP/XN/UC



3.5 CD CORE UNIT(COMP1D)(GUIDE PAGE)



C-b


SIGNAL LINE
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
C CD CORE UNIT(COMP1D)
IC201
PD63763CGJ
DER, MP3&WMA DECODER
DATA PROCESSOR
+ 3.3 V REGULATOR
IC701
PE5552A
CD CONTROLLER
CN902
CN901
A1/2 CN702
A1/2 CN701
Q701 UN2111

SIGNAL LINE
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE

C CD CORE UNIT(COMP1D)

IC201
D63763CGJ

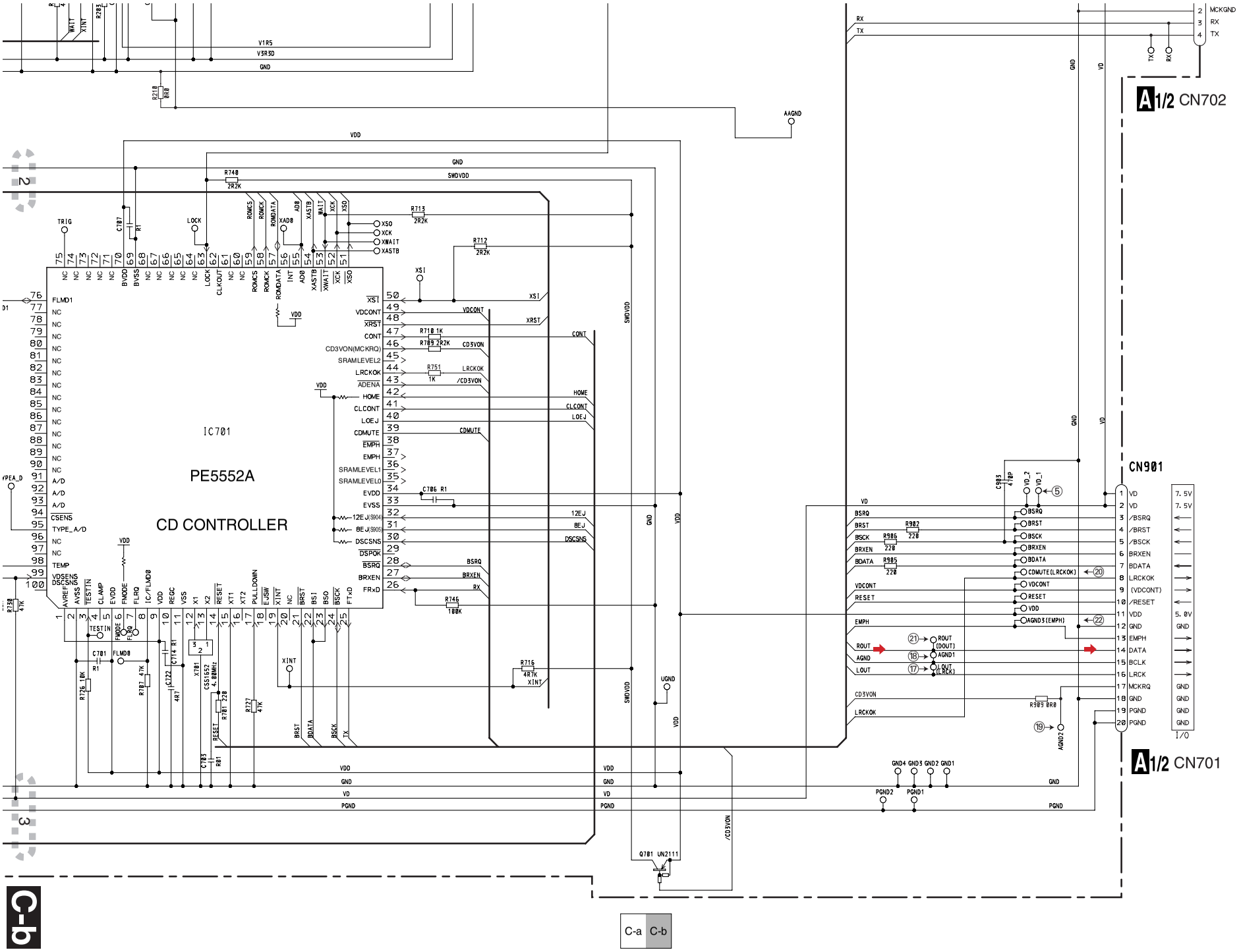
DER, MP3&WMA DECODER
DATA · PROCESSOR

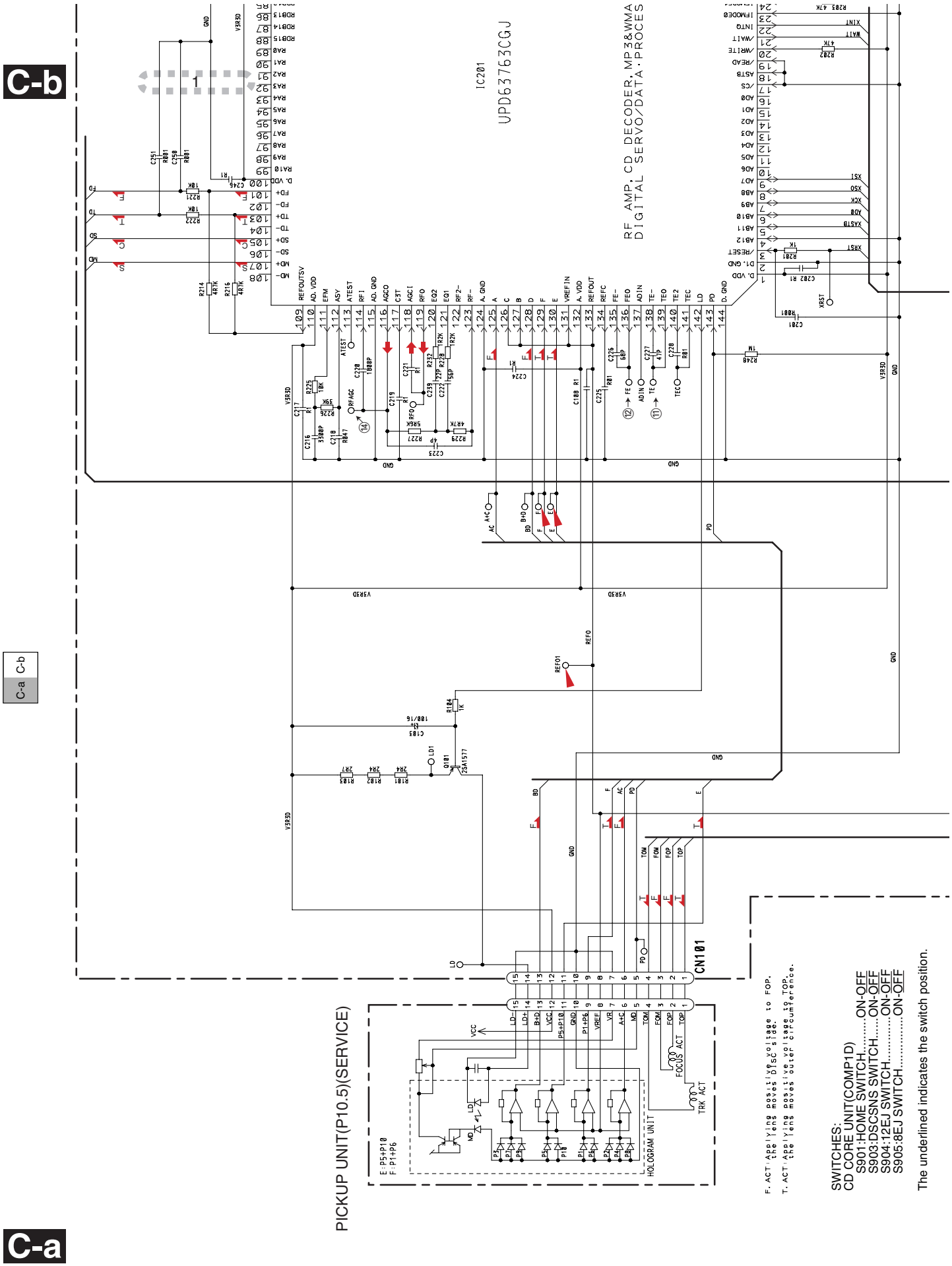
+ 3.3 V REGULATOR

IC203
NJM2886DL3-33

CN902
1 MCK
2 MCKGND
3 RX
4 TX

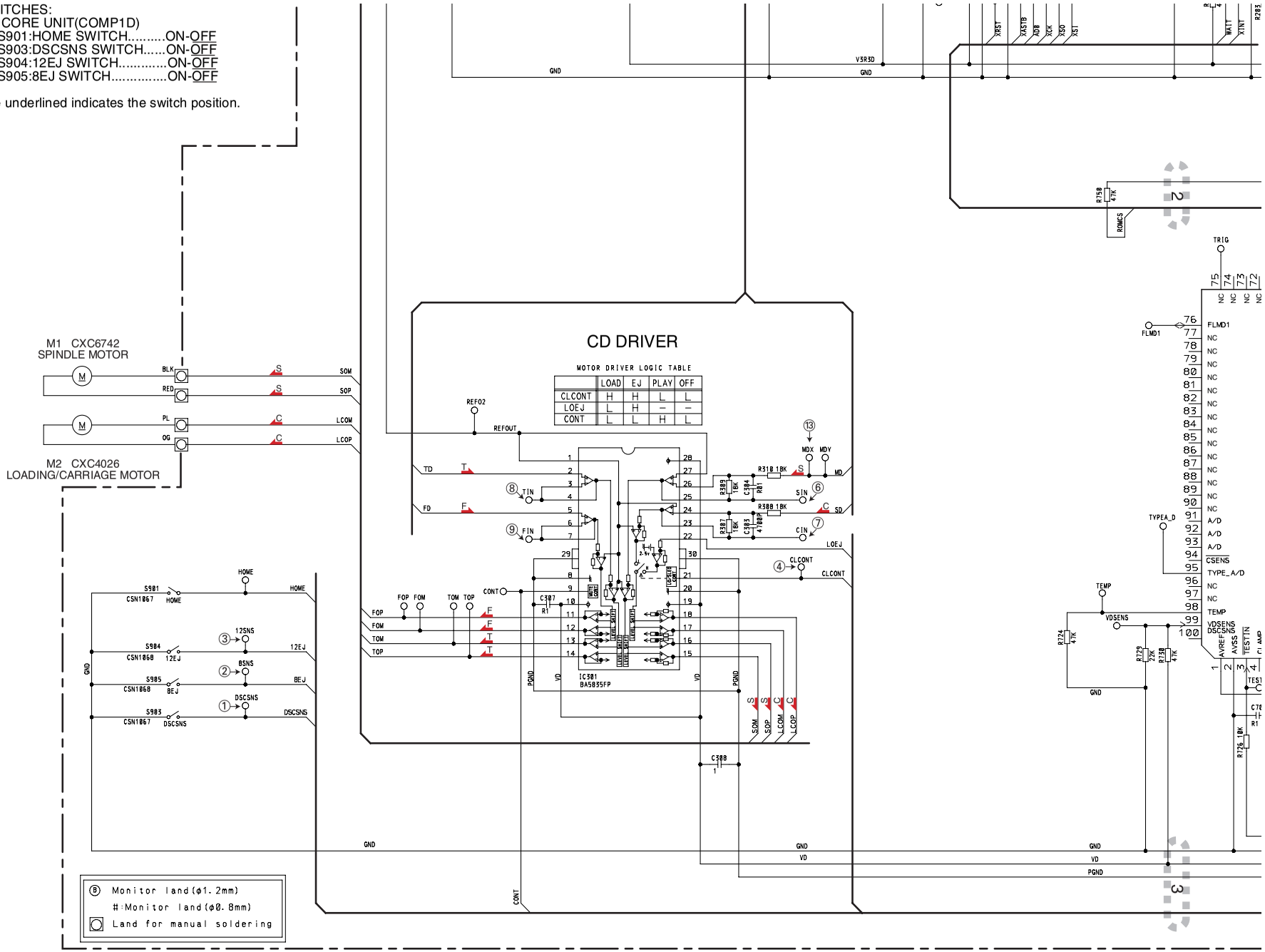
A 1/2 CN702


DEH-P780MP/XN/UC
C-b
C-a C-b
IC701
PE5552A
CD CONTROLLER
CN901
A1/2 CN702
A1/2 CN701
TRIG
LOCK
XSO
XCK
XWAIT
XASTB
XSI
VDCONT
XRST
CONT
CD3VON
LRCKOK
/CD3VON
HOME
CLCONT
LOEJ
CDMUTE
12EJ
BEJ
DSCSNS
BSRQ
BRXEN
RX
TX
XINT
RESET
TESTIN
FLMD0
FLMD1
BSRQ
BRST
BSCK
BRXEN
BDATA
VDCONT
RESET
EMPH
ROUT
AGND
LOUT
CD3VON
LRCKOK
VDD
GND
VD
PGND
SWDVDD
UGND
AAGND
Q701 UN2111


C-b
C-a
IC201
UPD63763CGJ
RF AMP, CD DECODER, MP3&WMA
DIGITAL SERVO/DATA PROCES
CN101
PICKUP UNIT(P10.5)(SERVICE)
HOLOGRAM UNIT
E: P5+P10
F: P1+P6
F. ACT: Applying positive voltage to FOP.
T. ACT: Applying positive voltage to TOP.
SWITCHES:
CD CORE UNIT(COMP1D)
S901:HOME SWITCH.....ON-OFF
S903:DSCSNS SWITCH.....ON-OFF
S904:12EJ SWITCH.....ON-OFF
S905:8EJ SWITCH.....ON-OFF
The underlined indicates the switch position.

SWITCHES:
CD CORE UNIT(COMP1D)
S901:HOME SWITCH.....ON-OFF
S903:DSCSNS SWITCH.....ON-OFF
S904:12EJ SWITCH.....ON-OFF
S905:8EJ SWITCH.....ON-OFF

The underlined indicates the switch position.



NOTE1) GND ...CD LSI, RFAMP, CPU
PGND ...Actuator, Motor Driver
AGND ...Audio
These GND's are not connected to each other on PCB.
PGND is connected to a floating mechanism part by a screw.

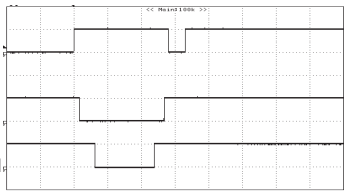
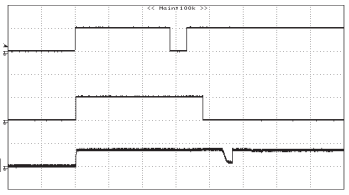
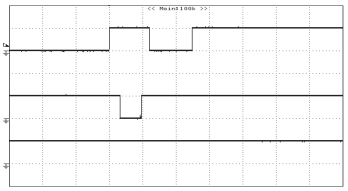
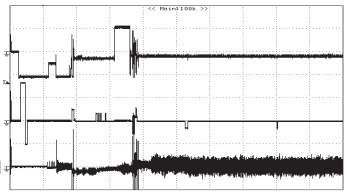
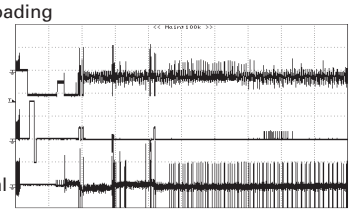
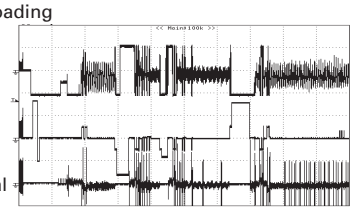
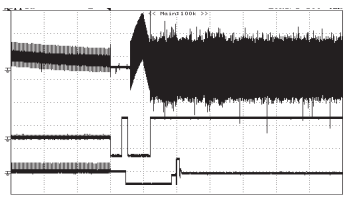
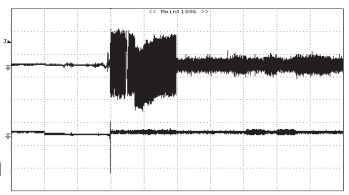
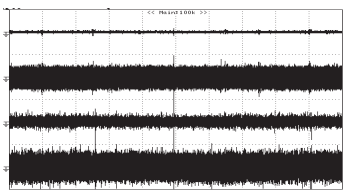
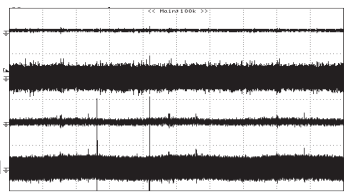
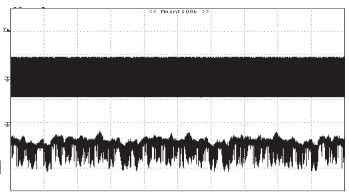
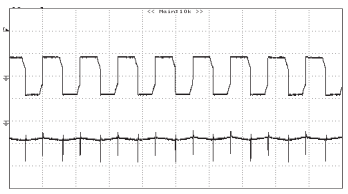
C-a C-b

C-a

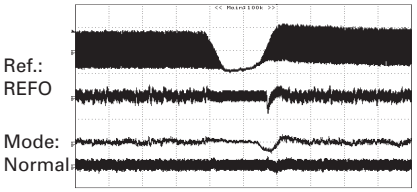
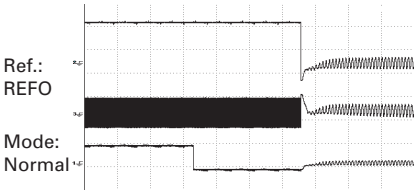
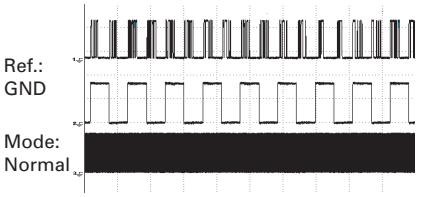
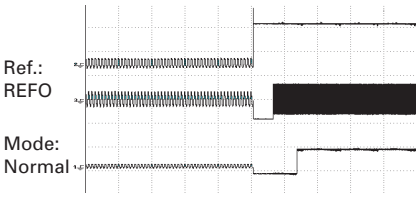
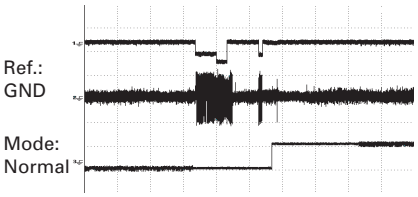
C-b

● Waveforms

Note : 1. The encircled numbers denote measuring points in the circuit diagram.
2. Reference voltage REFO1(1.65 V)

① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div 12 cm CD Loading operation Ref.: GND Mode: Normal 	① DSCSNS 5 V/div 500 ms/div ④ CLCONT 5 V/div ⑤ VD 10 V/div 12 cm CD Loading operation Ref.: GND Mode: Normal 	① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div 8 cm CD Loading operation Ref.: GND Mode: Normal 
⑥ SIN 1 V/div 1 s/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div 12 cm CD-DA setup operation after loading Ref.: REFO Mode: Normal 	⑥ SIN 1 V/div 1 s/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div 12 cm CD-ROM(1 session) setup operation after loading Ref.: REFO Mode: Normal 	⑥ SIN 1 V/div 1 s/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div 12 cm CD-ROM(3 sessions) setup operation after loading Ref.: REFO Mode: Normal 
⑨ FIN 200 mV/div 500 ms/div ⑩ RFOK 2 V/div ⑥ SIN 2 V/div 12 cm CD-DA Source On setup operation Ref.: REFO Mode: Normal 	⑪ TE 500 mV/div 200 ms/div ⑫ FE 500 mV/div Source On setup operation Ref.: REFO Mode: Normal 	⑫ FE 500 mV/div 20 ms/div ⑨ FIN 500 mV/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div CD-DA Play operation Ref.: REFO Mode: Normal 
⑫ FE 500 mV/div 20 ms/div ⑨ FIN 500 mV/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div CD-ROM play operation(Regular track Jump) Ref.: REFO Mode: Normal 	⑬ MDX 2 V/div 50 ms/div ⑥ SIN 200 mV/div Spindle waveform during play operation Ref.: REFO Mode: Normal 	⑬ MDX 2 V/div 5 µs/div ⑥ SIN 500 mV/div Spindle waveform during play operation (Wider) Ref.: REFO Mode: Normal 

⑨ FIN 500 mV/div 200 ms/div ⑫ FE 500 mV/div Focus Search waveform Ref.: REFO Mode: TEST	⑪ TE 500 mV/div 2 ms/div ⑭ RFAGC 500 mV/div Track Open waveform Ref.: REFO Mode: TEST	⑭ RFAGC 1 V/div 500 µs/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div 1 Track Jump waveform Ref.: REFO Mode: TEST
⑭ RFAGC 1 V/div 500 µs/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div 4 Tracks Jump waveform Ref.: REFO Mode: TEST	⑭ RFAGC 1 V/div 1 ms/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div 10 Tracks Jump waveform Ref.: REFO Mode: TEST	⑭ RFAGC 1 V/div 2 ms/div ⑪ TE 500 mV/div ⑧ TIN 500 mV/div 32 Tracks Jump waveform Ref.: REFO Mode: TEST
⑭ RFAGC 1 V/div 200 ms/div ⑪ TE 1 V/div ⑦ CIN 500 mV/div ⑥ SIN 2 V/div Search operation(Outter to Inner) Ref.: REFO Mode: Normal	① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div 12 cm CD Eject operation Ref.: GND Mode: Normal	① DSCSNS 5 V/div 500 ms/div ⑤ CLCONT 5 V/div ④ LOEJ 5 V/div 12 cm CD Eject operation Ref.: GND Mode: Normal
① DSCSNS 5 V/div 500 ms/div ② 8SNS 5 V/div ③ 12SNS 5 V/div 8 cm CD Eject operation Ref.: GND Mode: Normal	⑥ SIN 1 V/div 500 ms/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div CD-DA → CD-ROM mode change(Band key) Ref.: REFO Mode: Normal	⑥ SIN 1 V/div 500 ms/div ⑦ CIN 500 mV/div ⑧ TIN 500 mV/div CD-ROM → CD-DA mode change(Band key) Ref.: REFO Mode: Normal

⑭ RFAGC 1 V/div 500 µs/div ⑧ TIN 1 V/div ⑪ TE 1 V/div ⑨ FIN 1 V/div Black dot(800 µm) during play  	⑲ CD3VON 5 V/div 200 ms/div ⑰ LRCK 2 V/div ⑳ LRCKOK 2 V/div 12 cm CD Eject operation  	㉑ DOUT 2 V/div 20 µs/div ⑰ LRCK 2 V/div ⑱ BCK 2 V/div CD-DA play operation 
⑲ CD3VON 5 V/div 200 ms/div ⑰ LRCK 2 V/div ⑳ LRCKOK 2 V/div 12 cm CD-DA Source On setup operation  	⑦ CIN 500 mV/div 100 ms/div ⑪ TE 500 mV/div ㉒ EMPH 5 V/div Tracks Jump(EMPH : OFF → ON)  	

A

B

C

D

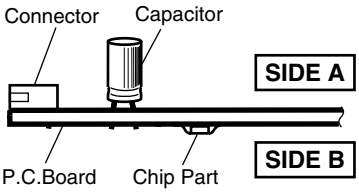
E

F

4. PCB CONNECTION DIAGRAM
4.1 TUNER AMP UNIT

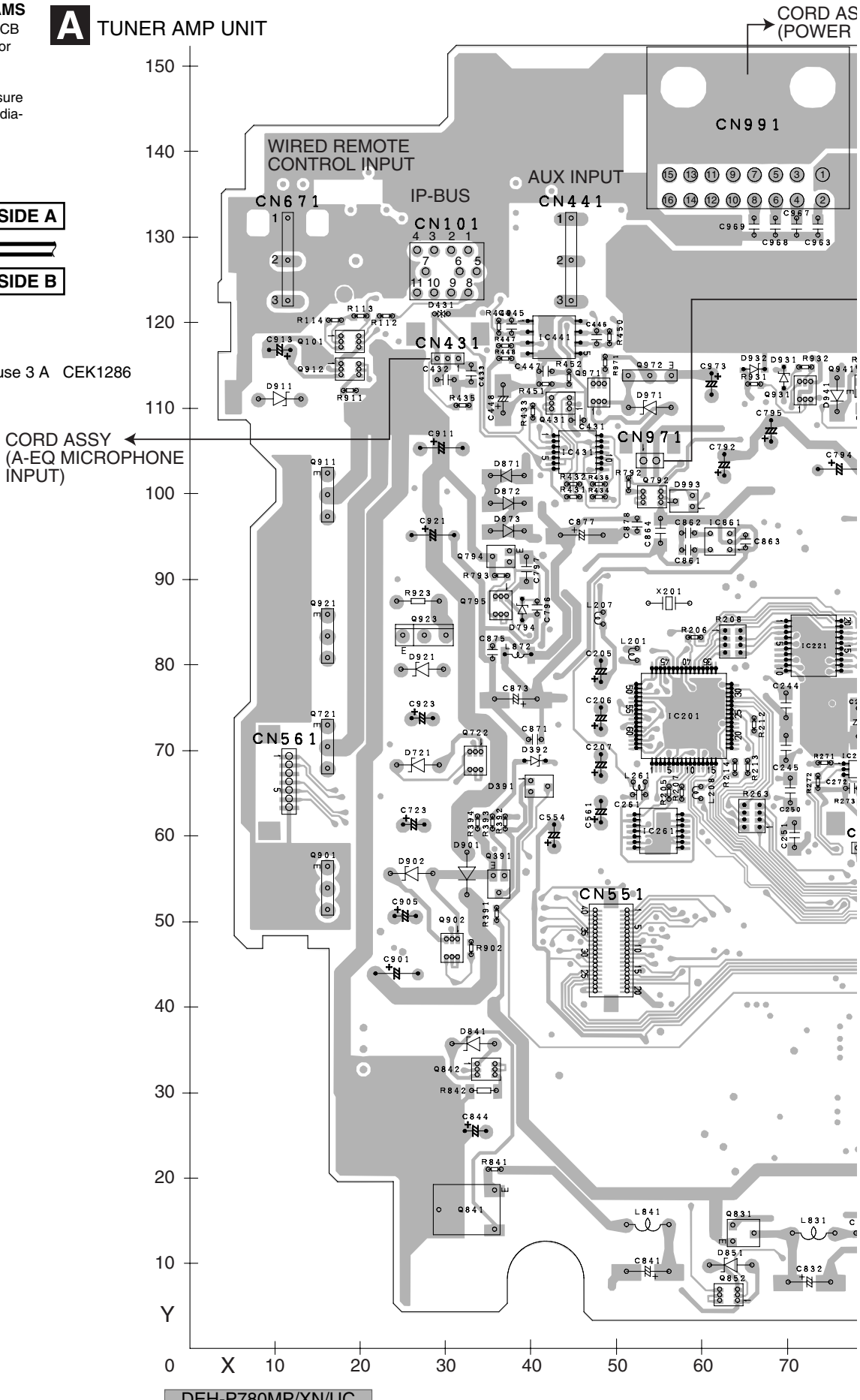
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams

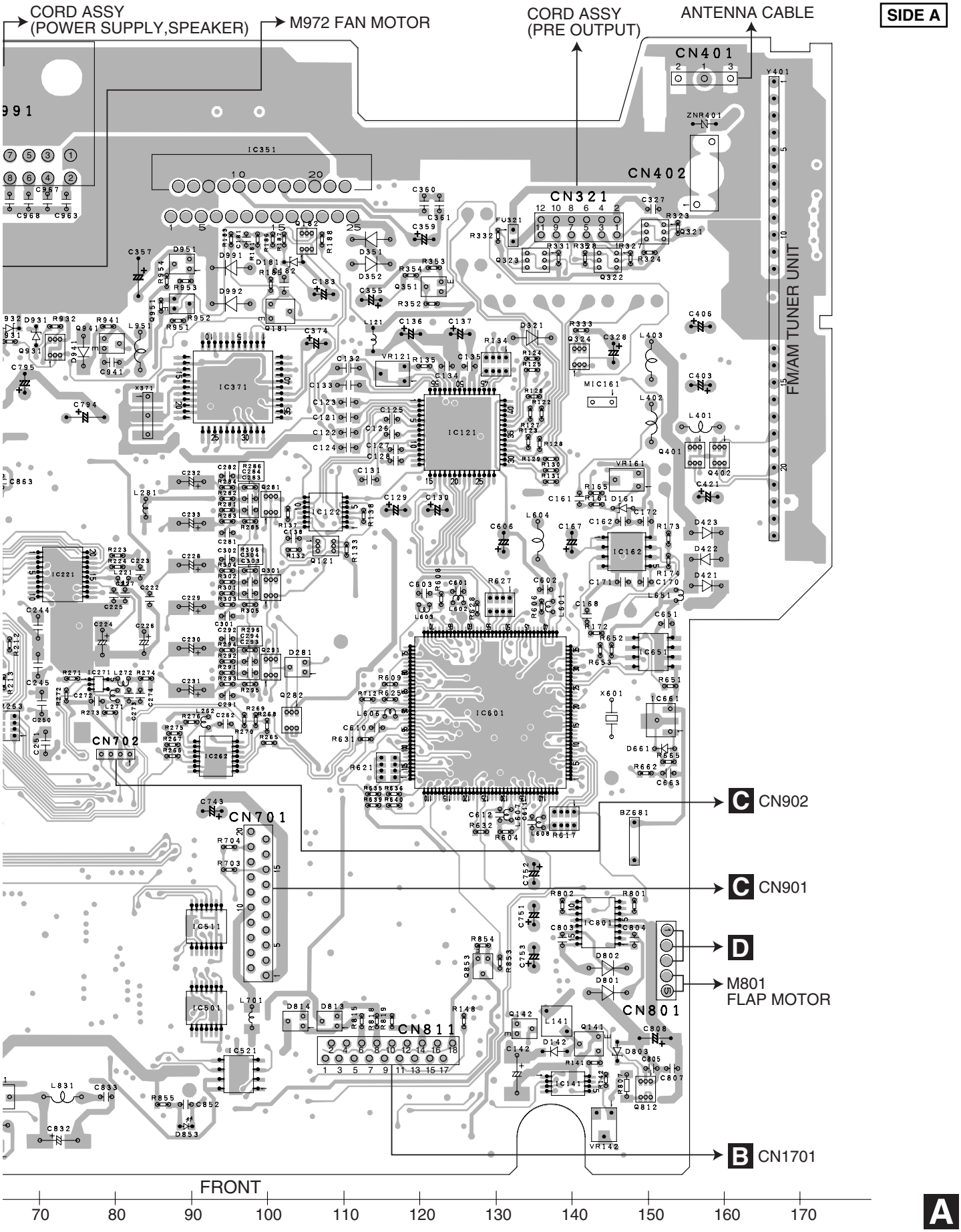


⚠ FU 321 (A,133,127) Fuse 3 A CEK1286

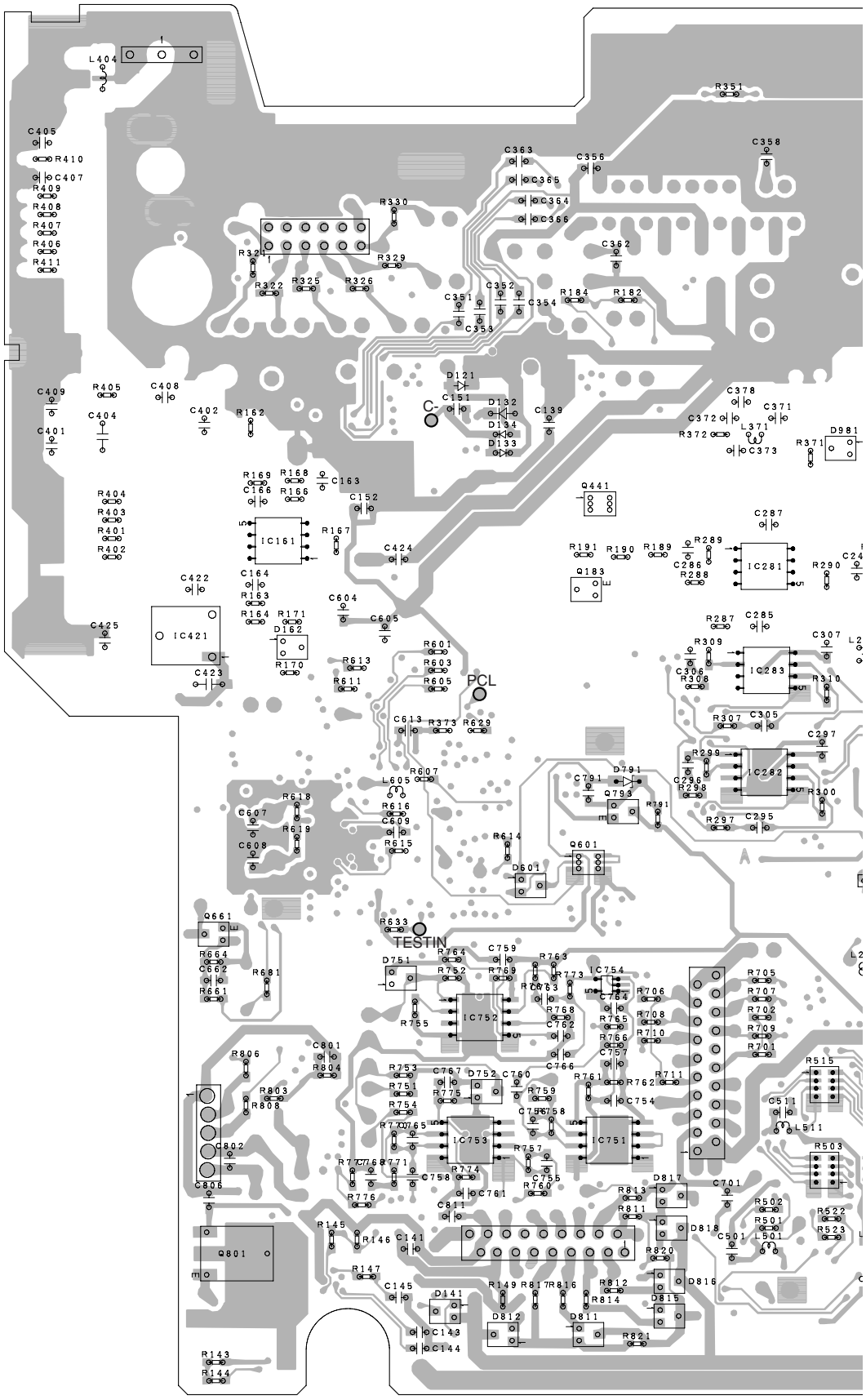
A TUNER AMP UNIT



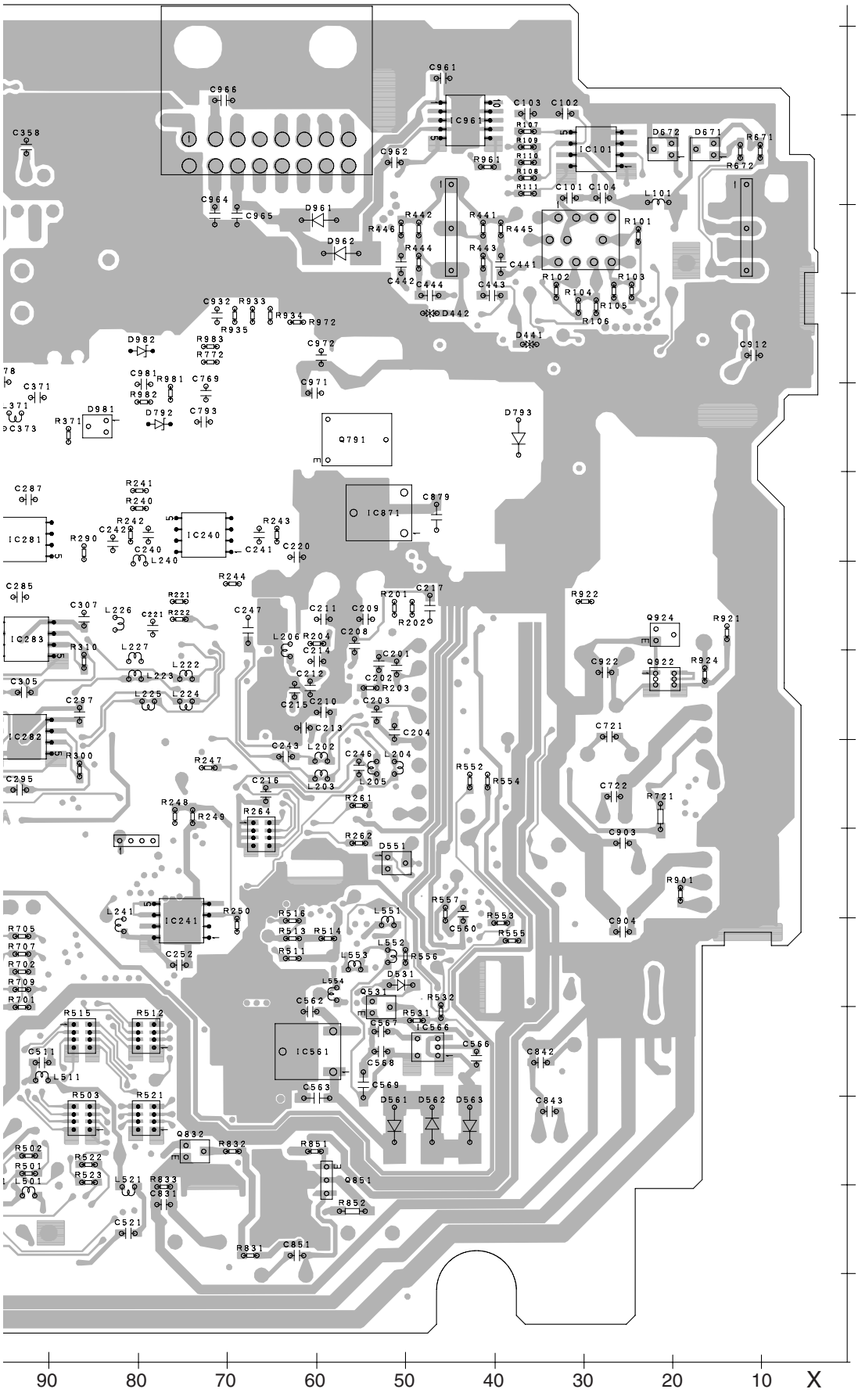
A


CORD ASSY
(POWER SUPPLY,SPEAKER)
M972 FAN MOTOR
CORD ASSY
(PRE OUTPUT)
ANTENNA CABLE
SIDE A
CN401
CN402
CN321
FM/AM TUNER UNIT
IC351
IC371
IC121
IC601
CN702
CN701
CN811
CN801
C CN902
C CN901
D
M801
FLAP MOTOR
B CN1701
FRONT
70 80 90 100 110 120 130 140 150 160 170
A

A TUNER AMP UNIT



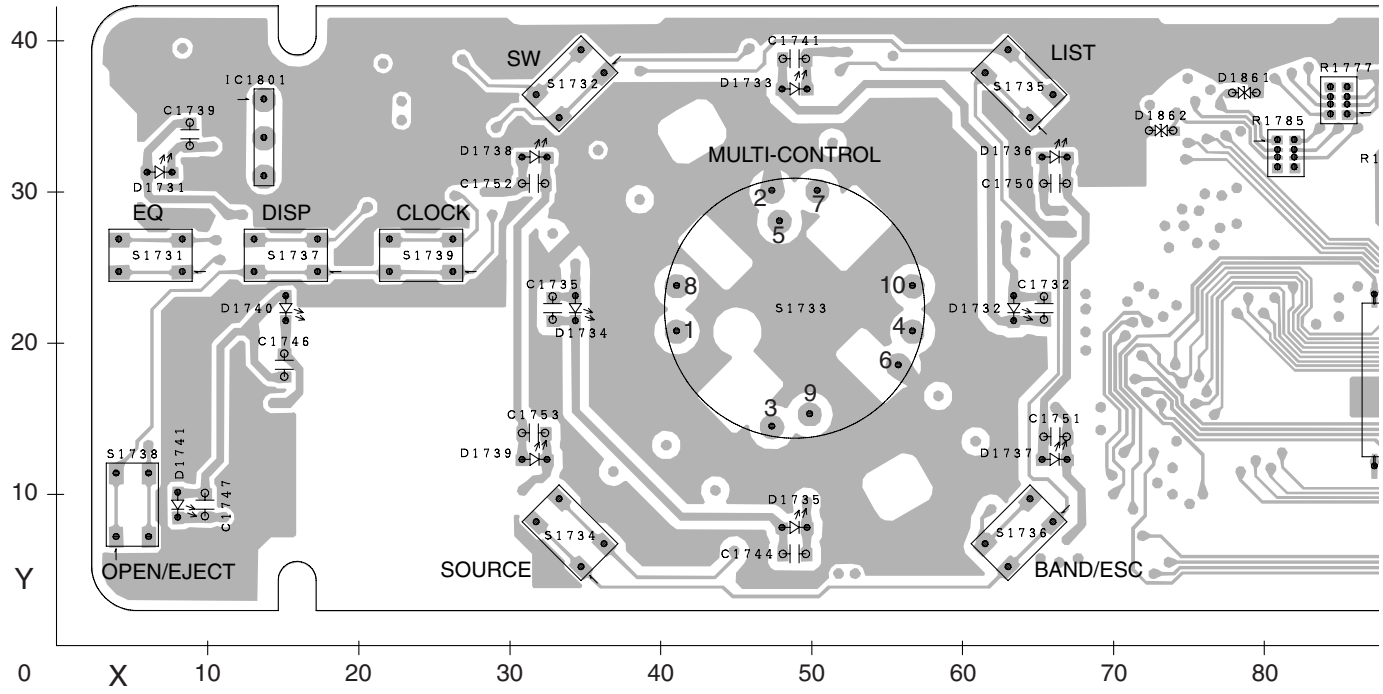
SIDE B



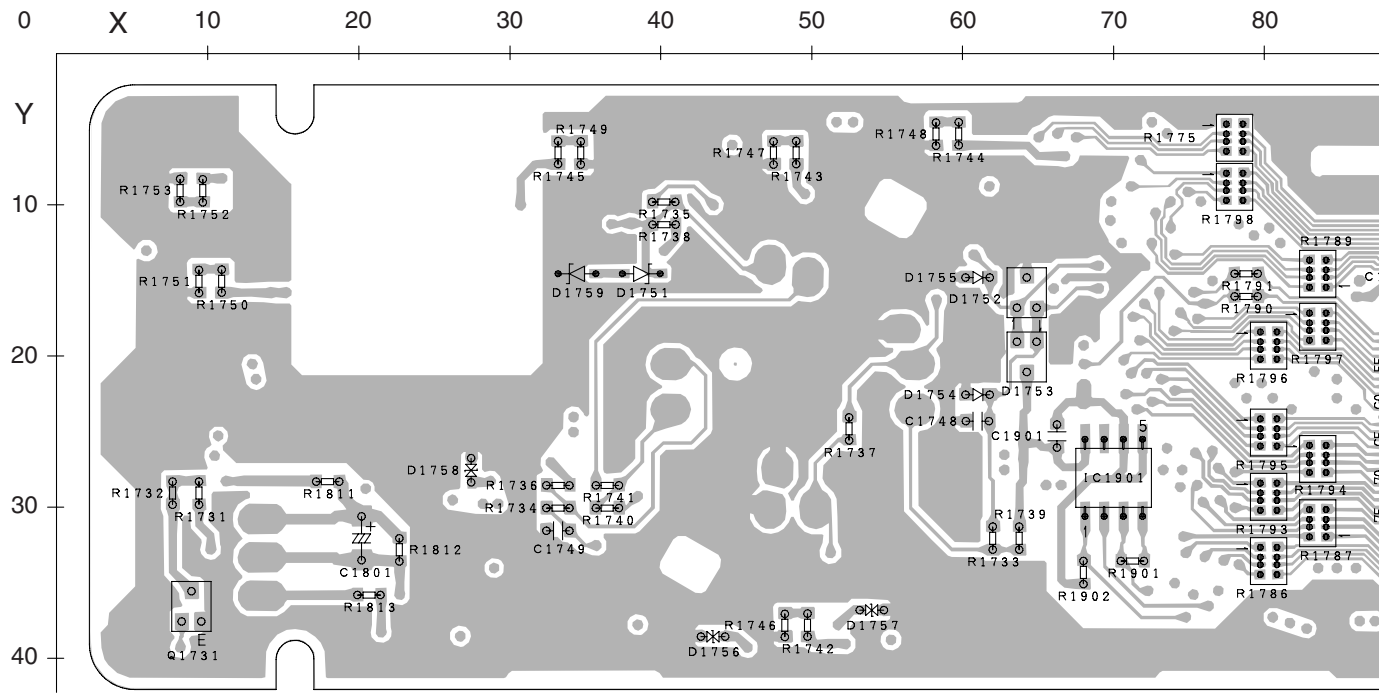
DEH-P780MP/XN/UC

4.2 KEYBOARD UNIT

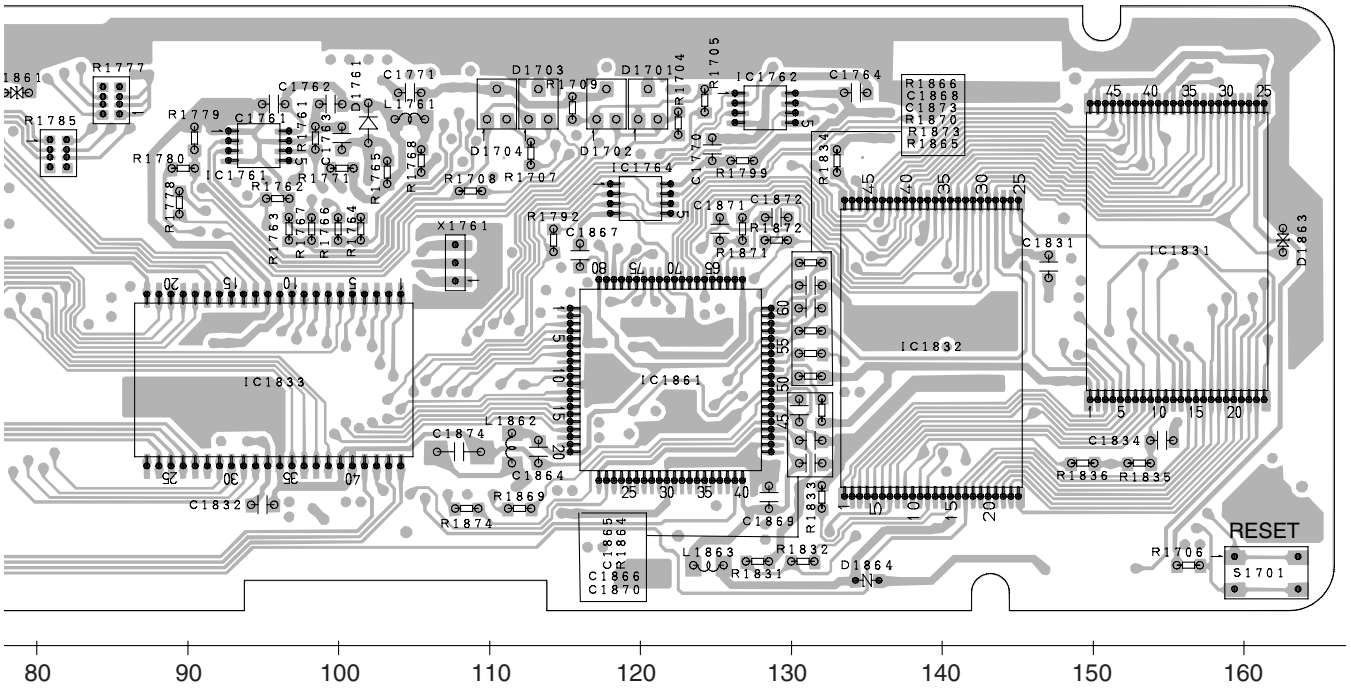
B KEYBOARD UNIT



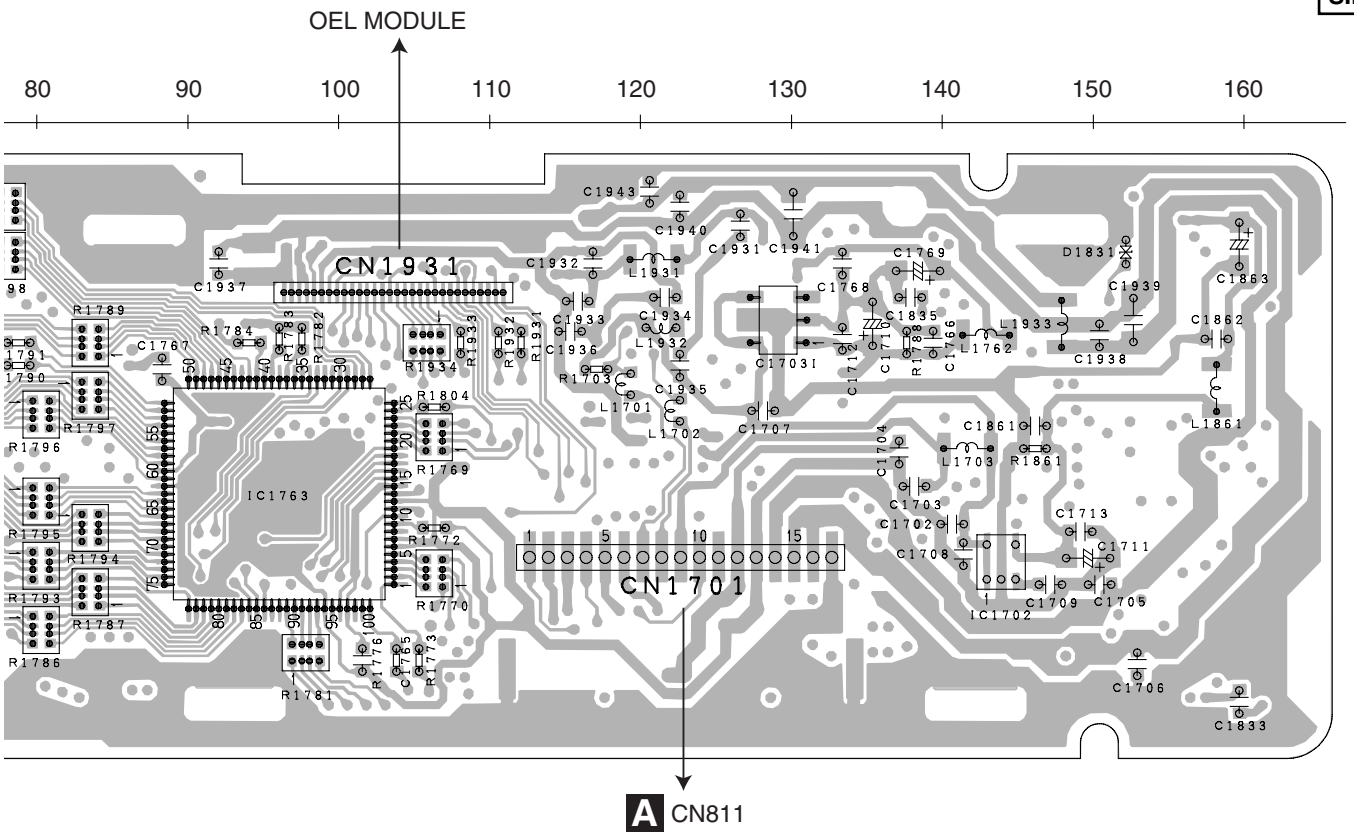
B KEYBOARD UNIT



SIDE A


RESET
S1701
IC1831
IC1832
IC1833
IC1861
80 90 100 110 120 130 140 150 160

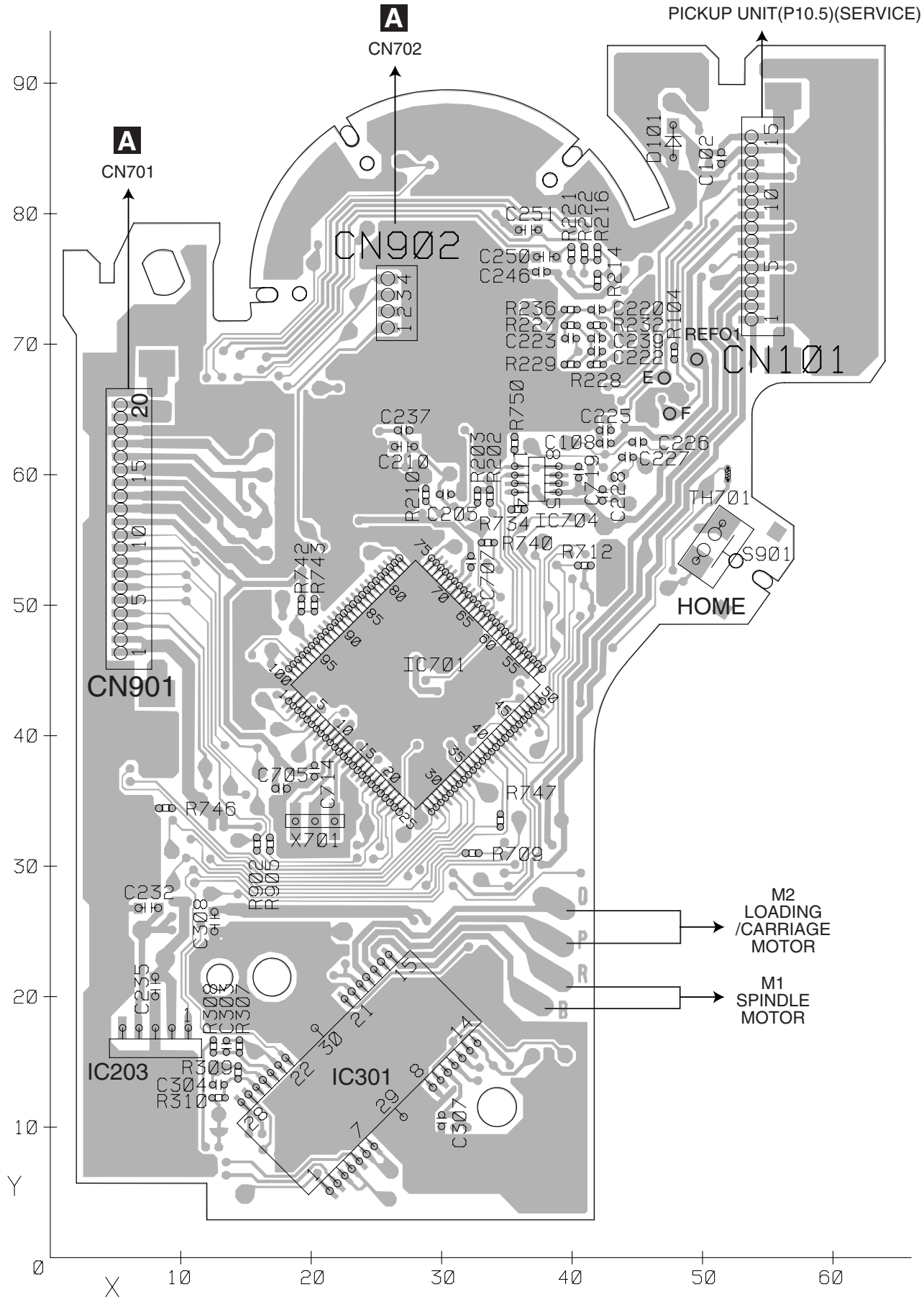
SIDE B


OEL MODULE
CN1931
CN1701
IC1763
IC1702
80 90 100 110 120 130 140 150 160
A CN811

4.3 CD CORE UNIT(COMP1D)

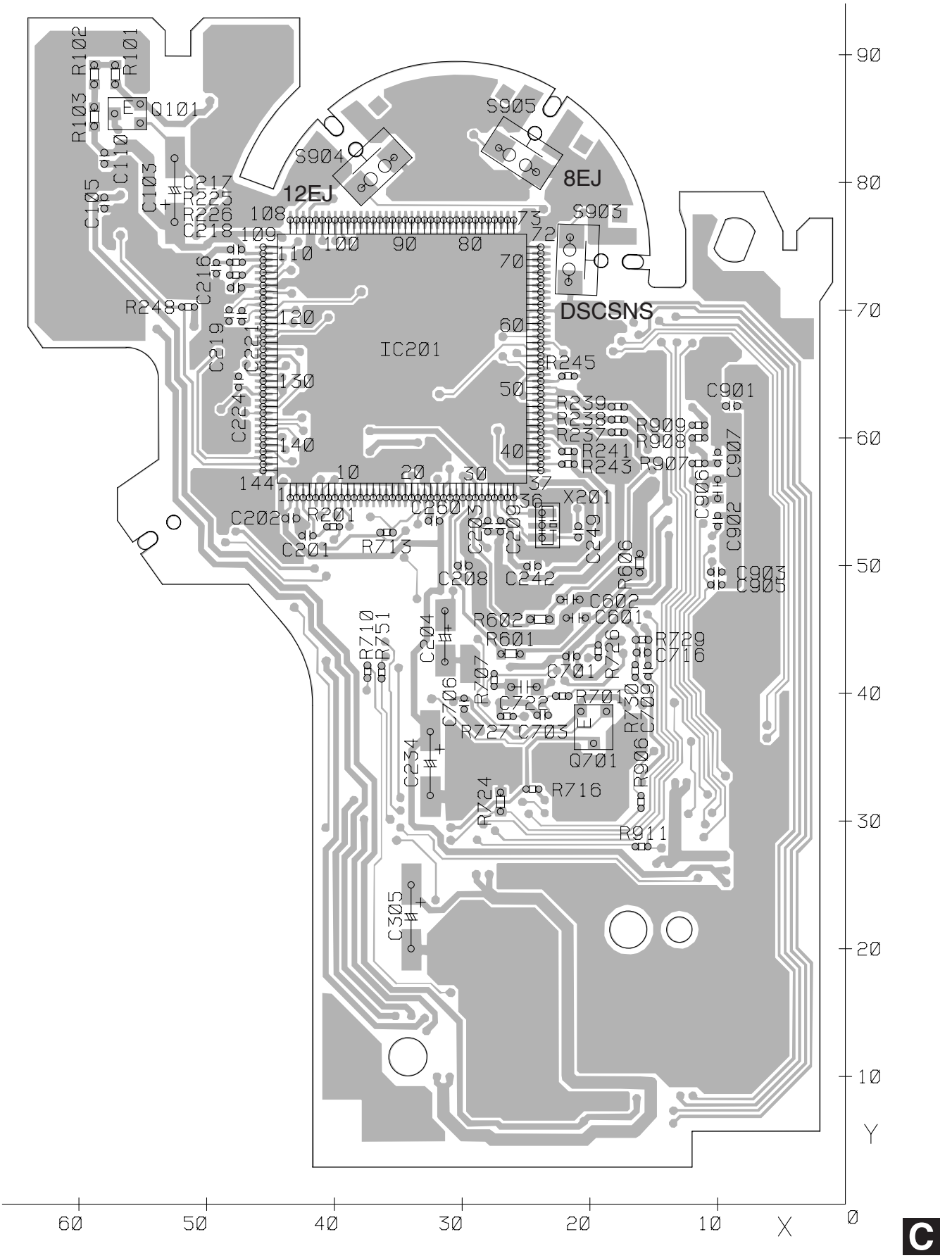
C CD CORE UNIT(COMP1D)

SIDE A



C CD CORE UNIT(COMP1D)

SIDE B



4.4 SWITCH UNIT

A

B

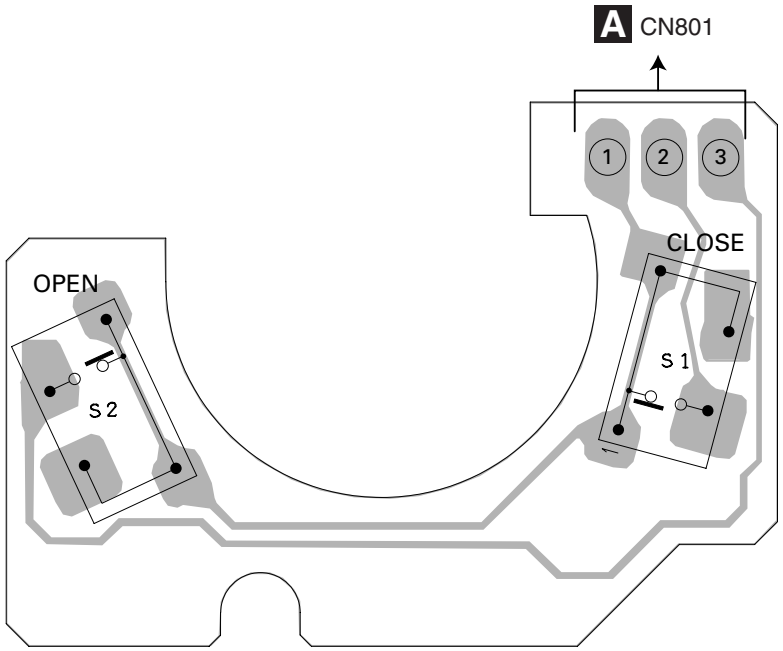
C

D

E

F

D SWITCH UNIT



5. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

  Chip Resistor

  RS1/◯S◯◯◯J,RS1/◯◯S◯◯◯J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*

  Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

  IC 301 (A, 91, 111) IC NJM2068V

Circuit Symbol and No. **Part No.**

Unit Number : CWN1757(DEH-P780MP/XN/UC)
Unit Name : Tuner Amp Unit
Unit Number : CWN1758(DEH-P7800MP/XN/UC)
Unit Name : Tuner Amp Unit
Unit Number : CWN1439(DEH-P8850MP/XN/ES)
Unit Name : Tuner Amp Unit
Unit Number :
Unit Name : Keyboard Unit
Unit Number : CWX3328
Unit Name : CD Core Unit(COMP1D)
Unit Number : CWS1389
Unit Name : Switch Unit

A

Unit Number : CWN1757(DEH-P780MP/XN/UC)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 101	(B,28,137) IC	HA12241FP
IC 121	(A,126,101) IC	PM9009A
IC 201	(A,58,74) IC	AK7732VT
IC 221	(A,73,83) IC	PCM1606EG
IC 240	(B,73,93) IC	NJM4558MD
IC 241	(B,75,50) IC	NJM4558MD
IC 261	(A,55,61) IC	TC74VHCT08AFTS1
IC 262	(A,94,59) IC	TC74VHC08FTS1
IC 271	(A,78,68) IC	TC7SH08FUS1
IC 281	(B,93,93) IC	NJM4558MD
IC 282	(B,93,71) IC	NJM4558MD
IC 283	(B,93,82) IC	NJM4558MD
IC 351	(A,100,136) IC	PAL007B
IC 371	(A,96,107) IC	PM8003A
IC 421	(B,157,85) IC	NJM2885DL1-33

Circuit Symbol and No.		Part No.
IC 441	(A,43,119) IC	NJM4558MD
IC 601	(A,130,64) IC	PEG221A
IC 661	(A,152,63) IC	S-80835CNUA-B8U
IC 751	(B,110,31) IC	NJM4558MD
IC 752	(B,124,44) IC	NJM4151M
IC 753	(B,125,31) IC	NJM4558MD
IC 754	(B,110,48) IC	TC7S14FU
IC 801	(A,144,37) IC	BA6288FS
IC 861	(A,62,95) IC	NJM2872F05
IC 871	(B,55,96) IC	NJM2885DL1-33
Q 101	(A,19,118) Transistor	UMF23N
Q 281	(A,101,92) Transistor	UMH3N
Q 282	(A,104,63) Transistor	UMD3N
Q 291	(A,101,70) Transistor	UMH3N
Q 301	(A,101,81) Transistor	UMH3N
Q 321	(A,152,128) Transistor	IMH23
Q 322	(A,145,124) Transistor	IMH23
Q 323	(A,136,124) Transistor	IMH23
Q 324	(A,142,111) Transistor	UMD3N
Q 351	(A,122,121) Transistor	DTC124EUA
Q 391	(A,36,55) Transistor	2SC4081
Q 601	(B,112,61) Transistor	UMD3N
Q 661	(B,152,53) Transistor	2SC4081
Q 721	(A,15,71) Transistor	2SD2396
Q 722	(A,34,69) Transistor	UMD3N
Q 793	(B,108,66) Transistor	2SC4081
Q 794	(A,37,93) Transistor	2SC4081
Q 795	(A,37,87) Transistor	UMD3N
Q 801	(B,148,19) Transistor	2SD1760F5
Q 812	(A,150,15) Transistor	UMD3N
Q 831	(A,65,14) Transistor	2SB710A
Q 832	(B,74,24) Transistor	DTC114EU
Q 841	(A,31,16) Transistor	2SD1760F5
Q 842	(A,35,33) Transistor	UMD3N
Q 851	(B,61,21) Transistor	2SD1767
Q 852	(A,63,6) Transistor	UMD3N
Q 853	(A,129,31) Transistor	2SC4081
Q 901	(A,15,54) Transistor	2SD2396
Q 902	(A,31,47) Transistor	UMD3N
Q 911	(A,15,100) Transistor	2SD2396
Q 912	(A,19,115) Transistor	UMD3N
Q 921	(A,15,84) Transistor	2SD2396

Circuit Symbol and No.		Part No.
Q 922	(B,21,77) Transistor	UMD3N
Q 931	(A,72,113) Transistor	UMX1N
Q 941	(A,80,113) Transistor	DTC114EU
Q 951	(A,89,118) Transistor	2SA1576
Q 971	(A,48,112) Transistor	UMD3N
Q 972	(A,54,114) Transistor	2SD1859
D 121	(B,126,112) Diode	RB520S-30
D 132	(B,121,109) Diode	1SS355
D 133	(B,121,105) Diode	RB521S-30
D 134	(B,121,107) Diode	RB521S-30
D 281	(A,104,70) Diode	DAN202U
D 321	(A,135,114) Diode	1SS133
D 351	(A,114,127) Diode	MPG06G-6415G50
D 352	(A,114,124) Diode	MPG06G-6415G50
D 391	(A,41,66) Diode	DAN202U
D 392	(A,41,69) Diode	HZU9L(A2)
D 421	(A,158,81) Diode	1SR154-400
D 422	(A,158,85) Diode	1SR154-400
D 423	(A,158,88) Diode	1SR154-400
D 441	(B,36,115) Diode	RSB6R8S
D 442	(B,47,118) Diode	RSB6R8S
D 601	(B,118,58) Diode	DAN202U
D 671	(B,16,137) Diode	DAN202U
D 672	(B,21,137) Diode	DAP202U
D 721	(A,27,69) Diode	HZS9L(A2)
D 751	(B,132,48) Diode Network	DA204U
D 752	(B,123,36) Diode Network	DA204U
D 791	(B,108,70) Diode	HZU6L(B1)
D 794	(A,39,87) Diode	HZU9L(B2)
D 801	(A,145,27) Diode	1SS133
D 802	(A,145,31) Diode	1SS133
D 803	(A,147,20) Diode	HZU7L(B2)
D 811	(B,112,10) Diode	DAN202U
D 812	(B,121,10) Diode	DAP202U
D 813	(A,109,24) Diode	DAN202U
D 814	(A,104,24) Diode	DAP202U
D 815	(B,103,12) Diode	DAN202U
D 816	(B,103,16) Diode	DAP202U
D 817	(B,103,25) Diode	DAN202U
D 818	(B,103,21) Diode	DAP202U
D 841	(A,33,36) Diode	HZS9L(C2)
D 851	(A,64,10) Diode	HZS11L(A1)
D 853	(A,90,10) LED	SML412BC5T(MN)
D 901	(A,33,56) Diode	MPG06G-6415G50
D 902	(A,26,56) Diode	HZS6L(B1)
D 911	(A,11,112) Diode	HZS9L(B2)
D 921	(A,27,80) Diode	HZS9L(B2)
D 931	(A,70,114) Diode	HZU7L(A1)
D 932	(A,66,115) Diode	HZU7L(C3)
D 941	(A,76,112) Diode	1SR154-400
D 951	(A,89,124) Diode	DAN202U
D 971	(A,54,111) Diode	HZS11L(B2)
D 981	(B,85,106) Diode Network	DA204U
D 982	(B,80,114) Diode	HZU7L(C2)
D 991	(A,96,123) Diode	MPG06G-6415G50
D 992	(A,96,118) Diode	MPG06G-6415G50
ZNR401	(A,158,142)Surge Protector	RCCA-201Q31UA-PI
L 101	(B,21,131) Inductor	LCTAW2R2J2520
L 121	(A,114,114) Coil	ATH1176
L 201	(A,53,82) Inductor	CTF1379

Circuit Symbol and No.		Part No.
L 206	(B,63,80) Inductor	CTF1389
L 208	(A,60,65) Inductor	CTF1389
L 221	(A,81,82) Inductor	CTF1379
L 241	(B,82,49) Inductor	CTF1389
L 261	(A,53,67) Inductor	CTF1379
L 262	(A,93,63) Inductor	CTF1379
L 271	(A,81,67) Inductor	CTF1389
L 272	(A,81,69) Inductor	CTF1379
L 371	(B,94,107) Inductor	CTF1379
L 401	(A,158,102) Inductor	LAU1R0K
L 402	(A,151,103) Ferri-Inductor	LAU100K
L 403	(A,151,111) Inductor	LAU1R0K
L 404	(B,164,146) Chip Coil	LCTAW4R7J2520
L 604	(A,136,87) Ferri-Inductor	LAU100K
L 701	(A,98,24) Inductor	LCTAW2R2J3225
L 831	(A,73,14) Ferri-Inductor	LAU100K
L 841	(A,54,15) Inductor	LAU2R2K
L 872	(A,39,82) Inductor	CTF1617
L 951	(A,84,112) Inductor	LAU2R2K
X 201	(A,56,88)Crystal Resonator 16.934 4 MHz	CSS1052
X 371	(A,85,104)Ceramic Resonator 4.096 MHz	CSS1429
X 601	(A,146,64)Crystal Resonator 20 MHz	VSS1167
VR121	(A,117,109)Semi-fixed 15 kΩ(B)	CCP1397
⚠FU321	(A,133,127) Fuse 3 A	CEK1286
BZ681	(A,149,47) Buzzer	CPV1062
	FM/AM Tuner Unit	CWE1952
M972	Fan Motor	CXM1288

RESISTORS

R 101	(B,24,127)	RS1/16S181J
R 102	(B,33,121)	RS1/16S181J
R 103	(B,24,121)	RS1/16S223J
R 104	(B,30,119)	RS1/16S223J
R 105	(B,26,121)	RS1/16S102J
R 106	(B,28,119)	RS1/16S102J
R 107	(B,36,139)	RS1/16S101J
R 108	(B,36,134)	RS1/16S101J
R 109	(B,36,137)	RS1/16S150J
R 110	(B,36,135)	RS1/16S470J
R 111	(B,36,132)	RS1/16S102J
R 112	(A,23,121)	RS1/16S222J
R 113	(A,20,121)	RS1/16S332J
R 114	(A,17,121)	RS1/16S562J
R 122	(A,137,104)	RS1/16S0R0J
R 123	(A,135,100)	RS1/16S0R0J
R 124	(A,135,111)	RS1/16S0R0J
R 125	(A,135,110)	RS1/16S0R0J
R 126	(A,136,106)	RS1/16S0R0J
R 127	(A,135,104)	RS1/16S0R0J
R 128	(A,136,100)	RS1/16S0R0J
R 129	(A,138,98)	RS1/16S0R0J
R 130	(A,138,96)	RS1/16S0R0J
R 131	(A,138,95)	RS1/16S0R0J
R 134	(A,131,110)	RAB4C102J
R 135	(A,121,110)	RS1/16S103J
R 137	(A,103,91)	RS1/16S0R0J
R 138	(A,113,90)	RS1/16S0R0J
R 201	(B,51,85)	RS1/16S104J
R 202	(B,49,85)	RS1/16S104J
R 203	(B,54,76)	RS1/16S153J

Circuit Symbol and No.		Part No.
R 204	(B,60,81)	RS1/16S222J
R 205	(A,56,65)	RS1/16S681J
R 206	(A,59,84)	RS1/16S101J
R 207	(A,58,65)	RS1/16S681J
R 208	(A,64,83)	RAB4C101J
R 212	(A,66,73)	RS1/16S101J
R 213	(A,66,68)	RS1/16S101J
R 214	(A,64,68)	RS1/16S101J
R 221	(B,75,86)	RS1/16S103J
R 222	(B,75,84)	RS1/16S103J
R 240	(B,80,96)	RS1/16S223J
R 241	(B,80,98)	RS1/16S223J
R 242	(B,81,93)	RS1/16S153J
R 243	(B,64,93)	RS1/16S153J
R 244	(B,69,88)	RS1/16S101J
R 247	(B,72,67)	RS1/16S101J
R 248	(B,76,62)	RS1/16S473J
R 249	(B,74,62)	RS1/16S473J
R 261	(B,55,63)	RS1/16S681J
R 262	(B,55,59)	RS1/16S681J
R 263	(A,66,63)	RAB4C123J
R 264	(B,66,60)	RAB4C223J
R 265	(A,101,60)	RS1/16S681J
R 266	(A,88,59)	RS1/16S681J
R 267	(A,88,60)	RS1/16S681J
R 268	(A,100,63)	RS1/16S681J
R 269	(A,99,63)	RS1/16S681J
R 270	(A,97,63)	RS1/16S681J
R 271	(A,75,69)	RS1/16S0R0J
R 273	(A,80,64)	RS1/16S0R0J
R 274	(A,84,69)	RS1/16S0R0J
R 275	(A,88,62)	RS1/16S681J
R 276	(A,90,63)	RS1/16S681J
R 281	(A,95,91)	RS1/16S473J
R 282	(A,95,93)	RS1/16S473J
R 283	(A,95,90)	RS1/16S682J
R 284	(A,95,94)	RS1/16S682J
R 285	(A,98,90)	RS1/16S682J
R 286	(A,98,94)	RS1/16S682J
R 287	(B,98,86)	RS1/16S102J
R 288	(B,100,91)	RS1/16S102J
R 289	(B,99,94)	RS1/16S101J
R 290	(B,86,91)	RS1/16S101J
R 291	(A,95,70)	RS1/16S473J
R 292	(A,95,71)	RS1/16S473J
R 293	(A,95,68)	RS1/16S682J
R 294	(A,95,73)	RS1/16S682J
R 295	(A,98,68)	RS1/16S682J
R 296	(A,98,73)	RS1/16S682J
R 297	(B,98,65)	RS1/16S102J
R 298	(B,101,68)	RS1/16S102J
R 299	(B,99,71)	RS1/16S101J
R 300	(B,87,67)	RS1/16S101J
R 301	(A,95,80)	RS1/16S473J
R 302	(A,95,82)	RS1/16S473J
R 303	(A,95,79)	RS1/16S682J
R 304	(A,95,83)	RS1/16S682J
R 305	(A,98,79)	RS1/16S682J
R 306	(A,98,83)	RS1/16S682J
R 307	(B,97,76)	RS1/16S102J

Circuit Symbol and No.		Part No.
R 308	(B,100,80)	RS1/16S102J
R 309	(B,99,83)	RS1/16S101J
R 310	(B,86,79)	RS1/16S101J
R 321	(B,148,125)	RS1/16S470J
R 322	(B,146,122)	RS1/16S470J
R 323	(A,155,128)	RS1/16S223J
R 324	(A,151,125)	RS1/16S223J
R 325	(B,142,123)	RS1/16S470J
R 326	(B,137,123)	RS1/16S470J
R 327	(A,148,124)	RS1/16S223J
R 328	(A,142,124)	RS1/16S223J
R 329	(B,133,125)	RS1/16S470J
R 330	(B,133,131)	RS1/16S470J
R 331	(A,139,124)	RS1/16S223J
R 332	(A,131,127)	RS1/16S223J
R 333	(A,142,115)	RS1/16S102J
R 351	(B,97,144)	RS1/16S103J
R 352	(A,122,118)	RS1/16S103J
R 353	(A,122,123)	RS1/16S103J
R 354	(A,119,122)	RS1/16S331J
R 371	(B,88,105)	RS1/16S0R0J
R 372	(B,98,107)	RS1/16S473J
R 373	(B,128,75)	RS1/16S104J
R 391	(A,36,51)	RS1/16S103J
R 392	(A,37,62)	RS1/16S223J
R 393	(A,36,62)	RS1/16S103J
R 394	(A,34,62)	RS1/16S473J
R 405	(B,164,111)	RS1/16S681J
R 406	(B,170,127)	RS1/16S681J
R 407	(B,170,129)	RS1/16S681J
R 408	(B,170,131)	RS1/16S681J
R 409	(B,170,133)	RS1/16S681J
R 410	(B,171,137)	RS1/16S681J
R 441	(B,41,128)	RS1/16S223J
R 442	(B,48,128)	RS1/16S223J
R 443	(B,41,124)	RS1/16S103J
R 444	(B,48,124)	RS1/16S103J
R 445	(B,39,128)	RS1/16S103J
R 446	(B,50,128)	RS1/16S103J
R 447	(A,37,118)	RS1/16S103J
R 448	(A,37,116)	RS1/16S103J
R 449	(A,36,120)	RS1/16S103J
R 450	(A,49,119)	RS1/16S103J
R 451	(A,42,113)	RS1/16S104J
R 452	(A,45,114)	RS1/16S104J
R 601	(B,128,84)	RS1/16S104J
R 603	(B,128,82)	RS1/16S104J
R 604	(A,132,49)	RS1/16S103J
R 605	(B,128,80)	RS1/16S104J
R 606	(A,137,78)	RS1/16S102J
R 607	(B,130,70)	RS1/16S104J
R 608	(A,123,79)	RS1/16S104J
R 609	(A,117,68)	RS1/16S102J
R 611	(B,138,80)	RS1/16S472J
R 613	(B,137,82)	RS1/16S472J
R 615	(B,132,62)	RS1/16S104J
R 616	(B,133,66)	RS1/16S104J
R 617	(A,140,50)	RAB4C104J
R 619	(B,143,63)	RS1/16S0R0J
R 621	(A,116,57)	RAB4C104J

Circuit Symbol and No.		Part No.
R 625	(A,117,66)	RS1/16S104J
R 627	(A,131,79)	RAB4C681J
R 628	(A,128,78)	RS1/16S681J
R 629	(B,124,75)	RS1/16S681J
R 631	(A,113,61)	RS1/16S104J
R 632	(A,129,49)	RS1/16S104J
R 633	(B,133,54)	RS1/16S104J
R 635	(A,114,54)	RS1/16S104J
R 639	(A,114,52)	RS1/16S104J
R 652	(A,146,73)	RS1/16S104J
R 661	(B,152,46)	RS1/16S222J
R 662	(A,150,56)	RS1/16S102J
R 664	(B,152,50)	RS1/16S473J
R 665	(A,153,58)	RS1/16S183J
R 671	(B,10,137)	RS1/16S102J
R 672	(B,12,137)	RS1/16S102J
R 681	(B,147,47)	RS1/16S102J
R 701	(B,93,40)	RS1/16S682J
R 702	(B,93,44)	RS1/16S682J
R 703	(A,95,44)	RS1/16S682J
R 704	(A,95,47)	RS1/16S682J
R 705	(B,93,48)	RS1/16S221J
R 706	(B,105,46)	RS1/16S221J
R 707	(B,93,46)	RS1/16S221J
R 708	(B,105,44)	RS1/16S221J
R 709	(B,93,42)	RS1/16S221J
R 710	(B,105,42)	RS1/16S681J
R 711	(B,103,37)	RS1/16S473J
R 712	(A,114,66)	RS1/16S104J
R 721	(B,21,62)	RS1/4SA391J
R 751	(B,132,36)	RS1/16S393J
R 752	(B,127,48)	RS1/16S104J
R 753	(B,132,38)	RS1/16S472J
R 754	(B,132,34)	RS1/16S471J
R 755	(B,131,45)	RS1/16S273J
R 757	(B,118,28)	RS1/16S104J
R 758	(B,116,32)	RS1/16S222J
R 759	(B,117,35)	RS1/16S471J
R 760	(B,117,25)	RS1/16S471J
R 761	(B,112,36)	RS1/16S473J
R 762	(B,109,37)	RS1/16S473J
R 763	(B,116,49)	RS1/16S103J
R 764	(B,127,50)	RS1/16S103J
R 765	(B,109,43)	RS1/16S473J
R 766	(B,109,41)	RS1/16S473J
R 767	(B,118,49)	RS1/16S472J
R 768	(B,115,44)	RS1/16S103J
R 769	(B,121,48)	RS1/16S682J
R 770	(B,133,31)	RS1/16S333J
R 771	(B,133,27)	RS1/16S332J
R 773	(B,114,47)	RS1/16S0R0J
R 774	(B,125,27)	RS1/16S473J
R 775	(B,127,35)	RS1/16S473J
R 776	(B,136,24)	RS1/16S473J
R 777	(B,137,27)	RS1/16S473J
R 791	(B,104,66)	RS1/16S122J
R 793	(A,37,91)	RS1/16S152J
R 801	(A,149,39)	RS1/16S102J
R 802	(A,139,39)	RS1/16S102J
R 803	(B,146,35)	RS1/16S103J
R 804	(B,140,38)	RS1/16S563J
R 806	(B,149,39)	RS1/16S102J
R 807	(A,148,15)	RS1/4SA102J
R 808	(B,149,35)	RS1/16S102J
R 811	(B,107,23)	RS1/16S222J
R 812	(B,109,15)	RS1/16S222J
R 813	(B,107,25)	RS1/16S222J
R 814	(B,112,14)	RS1/16S222J
R 815	(A,113,24)	RS1/16S222J
R 816	(B,115,14)	RS1/16S222J
R 817	(B,118,14)	RS1/16S222J
R 818	(A,115,24)	RS1/16S222J
R 819	(A,117,24)	RS1/16S104J
R 820	(B,104,18)	RS1/16S223J
R 821	(B,107,9)	RS1/16S473J
R 831	(B,67,12)	RS1/16S472J
R 832	(B,69,24)	RS1/16S821J
R 833	(B,77,20)	RS1/16S222J
R 841	(A,36,21)	RS1/16S1R0J
R 842	(A,35,30)	RS1/4SA271J
R 851	(B,60,24)	RS1/16S1R0J
R 852	(B,56,17)	RS1/4SA391J
R 853	(A,131,31)	RS1/16S562J
R 854	(A,129,34)	RS1/16S103J
R 855	(A,87,13)	RS1/16S151J
R 901	(B,19,53)	RS1/16S223J
R 902	(A,33,47)	RS1/16S272J
R 911	(A,19,113)	RS1/16S821J
R 921	(B,14,82)	RS1/16S821J
R 931	(A,66,113)	RS1/16S104J
R 932	(A,72,115)	RS1/16S103J
R 933	(B,67,118)	RS1/16S473J
R 934	(B,65,118)	RS1/16S473J
R 935	(B,69,118)	RS1/16S472J
R 941	(A,79,115)	RS1/16S103J
R 951	(A,89,116)	RS1/16S102J
R 952	(A,86,118)	RS1/16S472J
R 953	(A,90,121)	RS1/16S472J
R 954	(A,87,121)	RS1/16S153J
R 971	(A,49,116)	RS1/16S391J
R 972	(B,62,117)	RS1/16S1R0J
R 981	(B,76,109)	RS1/16S102J
R 982	(B,79,108)	RS1/16S153J
R 983	(B,72,115)	RS1/16S102J

CAPACITORS

C 101	(B,31,131)	CKSRYB104K16
C 102	(B,32,141)	CKSRYB102K50
C 103	(B,36,141)	CKSRYB102K50
C 121	(A,111,103)	CKSQYB225K10
C 122	(A,111,101)	CKSQYB225K10
C 123	(A,111,105)	CKSQYB225K10
C 124	(A,111,99)	CKSQYB225K10
C 125	(A,117,103)	CKSRYB105K10
C 126	(A,117,101)	CKSRYB105K10
C 127	(A,117,99)	CKSRYB104K16
C 128	(A,117,98)	CKSRYB104K16
C 129	(A,117,91)	CEJQ4R7M35
C 130	(A,123,91)	CEJQ4R7M35
C 131	(A,114,95)	CKSQYB225K10
C 132	(A,111,110)	CKSYB475K10

Circuit Symbol and No.		Part No.
C 133	(A,111,108)	CKSYB475K10
C 134	(A,124,110)	CKSRYB105K10
C 135	(A,127,110)	CKSRYB105K10
C 136	(A,119,114)	CEJQ470M10
C 137	(A,126,114)	CEJQ470M10
C 139	(B,116,108)	CKSRYB105K10
C 151	(B,126,110)	CKSRYB105K10
C 201	(B,51,78)	CKSRYB104K16
C 202	(B,53,79)	CKSRYB682K50
C 203	(B,53,73)	CKSRYB104K16
C 204	(B,51,71)	CKSRYB104K16
C 205	(A,48,80)	CEJQ100M16
C 206	(A,48,74)	CEJQ100M16
C 207	(A,48,69)	CEJQ100M16
C 208	(B,56,81)	CKSRYB104K16
C 209	(B,54,84)	CCSRCH8R0D50
C 210	(B,59,73)	CKSRYB104K16
C 211	(B,59,84)	CCSRCH8R0D50
C 212	(B,61,76)	CKSRYB104K16
C 213	(B,61,72)	CKSRYB104K16
C 214	(B,60,79)	CCSRCH680J50
C 215	(B,62,76)	CKSRYB104K16
C 216	(B,66,64)	CCSRCH680J50
C 217	(B,47,85)	CKSYB106K6R3
C 220	(B,62,91)	CKSRYB103K50
C 221	(B,78,83)	CCSRCH101J50
C 224	(A,79,74)	CEVW100M10
C 225	(A,80,80)	CKSRYB104K16
C 226	(A,84,74)	CSZS100M16
C 227	(A,82,80)	CKSRYB104K16
C 228	(A,90,84)	CEVW100M10
C 229	(A,90,78)	CEVW100M10
C 230	(A,90,73)	CEVW100M10
C 231	(A,90,67)	CEVW100M10
C 232	(A,90,95)	CEVW100M10
C 233	(A,90,89)	CEVW100M10
C 240	(B,79,93)	CCSRCH220J50
C 241	(B,66,93)	CCSRCH220J50
C 242	(B,83,92)	CKSRYB104K16
C 243	(B,63,68)	CKSRYB332K50
C 244	(A,70,76)	CKSYB106K6R3
C 245	(A,70,71)	CKSYB106K6R3
C 246	(B,55,67)	CKSRYB332K50
C 247	(B,68,83)	CKSYB106K6R3
C 250	(A,71,66)	CKSYB106K6R3
C 251	(A,71,60)	CKSYB106K6R3
C 252	(B,75,45)	CKSRYB104K16
C 261	(A,53,65)	CKSRYB104K16
C 262	(A,95,63)	CKSRYB104K16
C 272	(A,78,66)	CCSRCH560J50
C 273	(A,82,67)	CKSRYB103K50
C 281	(A,95,88)	CCSRCH681J50
C 282	(A,95,96)	CCSRCH681J50
C 283	(A,98,91)	CCSRCH331J50
C 284	(A,98,93)	CCSRCH331J50
C 285	(B,93,86)	CKSRYB105K10
C 286	(B,101,95)	CKSRYB105K10
C 287	(B,92,97)	CKSRYB104K16
C 291	(A,95,67)	CCSRCH681J50
C 292	(A,95,74)	CCSRCH681J50

Circuit Symbol and No.		Part No.
C 293	(A,98,70)	CCSRCH331J50
C 294	(A,98,71)	CCSRCH331J50
C 295	(B,93,65)	CKSRYB105K10
C 296	(B,101,71)	CKSRYB105K10
C 297	(B,87,73)	CKSRYB104K16
C 301	(A,95,77)	CCSRCH681J50
C 302	(A,95,85)	CCSRCH681J50
C 303	(A,98,80)	CCSRCH331J50
C 304	(A,98,82)	CCSRCH331J50
C 305	(B,93,76)	CKSRYB105K10
C 306	(B,101,83)	CKSRYB105K10
C 307	(B,86,84)	CKSRYB104K16
C 321	(A,151,119)	CEJQNP100M10
C 322	(A,144,119)	CEJQNP100M10
C 323	(A,138,119)	CEJQNP100M10
C 324	(A,131,119)	CEJQNP100M10
C 325	(A,127,124)	CEJQNP100M10
C 326	(A,128,130)	CEJQNP100M10
C 327	(A,151,131)	CKSRYB102K50
C 328	(A,146,112)	CEJQ220M16
C 351	(B,126,120)	CKSQYB474K16
C 352	(B,121,121)	CKSQYB474K16
C 353	(B,124,120)	CKSQYB474K16
C 354	(B,119,121)	CKSQYB474K16
C 355	(A,114,119)	CEJQ330M10
C 357	(A,83,122) 3 300 µF/16 V	CCH1486
C 358	(B,93,137)	CKSRYB104K25
C 359	(A,121,127)	CEHAR100M16
C 360	(A,121,132)	CKSQYB225K10
C 361	(A,123,132)	CKSQYB225K10
C 363	(B,119,137)	CKSRYB474K10
C 364	(B,118,132)	CKSRYB474K10
C 365	(B,119,135)	CKSRYB474K10
C 366	(B,118,130)	CKSRYB474K10
C 371	(B,91,109)	CKSRYB104K16
C 372	(B,97,109)	CKSRYB104K16
C 373	(B,96,105)	CKSRYB104K16
C 374	(A,107,113)	CEAL100M16
C 378	(B,95,111)	CKSRYB105K10
C 401	(B,170,106)	CKSRYB103K50
C 402	(B,153,108)	CKSRYB102K50
C 403	(A,158,108)	CEJQ470M10
C 404	(B,164,107)	CKSYB475K10
C 405	(B,171,139)	CKSRYB103K50
C 406	(A,158,115)	CEJQ101M10
C 408	(B,158,111)	CKSRYB102K50
C 421	(A,159,93)	CEJQ220M16
C 422	(B,154,90)	CKSRYB103K50
C 423	(B,153,80)	CKSYB475K10
C 424	(B,132,94)	CKSRYB103K50
C 441	(B,39,124)	CKSQYB225K10
C 442	(B,50,124)	CKSQYB225K10
C 443	(B,40,120)	CKSQYB225K10
C 444	(B,47,120)	CKSQYB225K10
C 445	(A,38,120)	CCSRCH101J50
C 446	(A,48,119)	CCSRCH101J50
C 447	(A,42,115)	CKSRYB105K10
C 448	(A,37,112)	CEVW100M10
C 601	(A,126,80)	CKSRYB104K16
C 602	(A,137,81)	CKSRYB104K16

Circuit Symbol and No.		Part No.
C 603	(A,121,80)	CKSRYB104K16
C 605	(B,134,86)	CKSRYB103K50
C 606	(A,132,87)	CEJQ4R7M35
C 607	(B,148,65)	CCSRCH7R0D50
C 608	(B,148,61)	CCSRCH7R0D50
C 610	(A,115,62)	CKSRYB104K16
C 611	(A,135,50)	CKSRYB104K16
C 612	(A,131,51)	CKSRYB104K16
C 613	(B,131,75)	CCSRCH331J50
C 662	(B,152,48)	CKSRYB104K16
C 663	(A,153,56)	CKSRYB105K10
C 721	(B,27,71)	CKSRYB473K25
C 722	(B,26,64)	CKSRYB102K50
C 723	(A,26,62)	CEJQ101M10
C 743	(A,93,51)	CEJQ101M10
C 751	(A,136,38)	CEJQ4R7M35
C 752	(A,136,43)	CEJQ1R0M50
C 753	(A,136,32)	CEJQ4R7M35
C 754	(B,109,35)	CKSRYB104K16
C 755	(B,116,28)	CKSRYB102K50
C 756	(B,118,32)	CCSRCH101J50
C 758	(B,131,27)	CKSRYB105K10
C 759	(B,121,50)	CKSRYB104K16
C 760	(B,120,36)	CKSRYB104K16
C 761	(B,125,25)	CKSRYB104K16
C 762	(B,115,42)	CKSRYB472K50
C 763	(B,117,46)	CKSRYB102K50
C 764	(B,109,45)	CKSRYB104K16
C 765	(B,131,31)	CKSRYB471K50
C 768	(B,135,27)	CKSRYB104K16
C 769	(B,72,109)	CKSRYB153K50
C 791	(B,112,68)	CKSRYB103K50
C 796	(A,41,87)	CKSRYB103K50
C 801	(B,140,40)	CKSRYB103K50
C 802	(B,151,29)	CKSRYB102K50
C 803	(A,139,34)	CCSRCH101J50
C 804	(A,149,34)	CCSRCH101J50
C 806	(B,153,24)	CKSRYB102K50
C 807	(A,154,17)	CKSRYB104K16
C 808	(A,152,21)	CEVW220M16
C 831	(B,77,18)	CKSRYB104K16
C 832	(A,73,8)	CEVW470M10
C 841	(A,54,9)	CEVW470M16
C 842	(B,35,34)	CKSRYB104K16
C 843	(B,34,28)	CKSRYB102K50
C 844	(A,34,26)	CEJQ330M16
C 851	(B,62,12)	CKSRYB473K25
C 852	(A,90,13)	CKSRYB104K16
C 861	(A,59,94)	CKSRYB105K6R3
C 862	(A,59,96)	CKSRYB103K50
C 863	(A,65,95)	CKSRYB104K16
C 871	(A,41,72)	CKSRYB104K16
C 873	(A,38,76)	CEVW101M6R3
C 875	(A,36,82)	CKSRYB105K10
C 877	(A,46,96)	CEVW101M6R3
C 878	(A,53,97)	CKSRYB103K50
C 879	(B,46,95)	CKSYB475K10
C 901	(A,24,44) 2 200 µF/16 V	CCH1405
C 903	(B,25,59)	CKSRYB472K50
C 904	(B,25,49)	CKSRYB103K50
C 905	(A,25,51)	CEJQ470M10
C 911	(A,30,106)	CEJQ221M10
C 912	(B,11,114)	CKSRYB103K50
C 913	(A,11,117)	CEJQ101M10
C 921	(A,29,96) 470 µF/16 V	CCH1325
C 922	(B,27,78)	CKSRYB103K50
C 923	(A,27,74)	CEJQ101M10
C 932	(B,71,118)	CKSRYB104K16
C 941	(A,80,111)	CKSQYB105K16
C 963	(A,74,132)	CKSQYB105K10
C 964	(B,71,129)	CKSQYB105K16
C 965	(B,69,129)	CKSQYB105K16
C 966	(B,70,142)	CKSQYB105K16
C 967	(A,71,132)	CKSQYB105K16
C 968	(A,69,132)	CKSQYB105K16
C 969	(A,66,132)	CKSQYB105K16
C 971	(B,60,109)	CKSRYB103K50
C 972	(B,59,113)	CKSRYB103K50
C 973	(A,61,113)	CEJQ100M16
C 981	(B,79,110)	CKSRYB104K16

A

Unit Number : CWN1758(DEH-P7800MP/XN/UC)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 101	(B,28,137) IC	HA12241FP
IC 121	(A,126,101) IC	PM9009A
IC 201	(A,58,74) IC	AK7732VT
IC 221	(A,73,83) IC	PCM1606EG
IC 240	(B,73,93) IC	NJM4558MD
IC 241	(B,75,50) IC	NJM4558MD
IC 261	(A,55,61) IC	TC74VHCT08AFTS1
IC 262	(A,94,59) IC	TC74VHC08FTS1
IC 271	(A,78,68) IC	TC7SH08FUS1
IC 281	(B,93,93) IC	NJM4558MD
IC 282	(B,93,71) IC	NJM4558MD
IC 283	(B,93,82) IC	NJM4558MD
IC 351	(A,100,136) IC	PAL007B
IC 371	(A,96,107) IC	PM8003A
IC 421	(B,157,85) IC	NJM2885DL1-33
IC 441	(A,43,119) IC	NJM4558MD
IC 601	(A,130,64) IC	PEG221A
IC 661	(A,152,63) IC	S-80835CNUA-B8U
IC 751	(B,110,31) IC	NJM4558MD
IC 752	(B,124,44) IC	NJM4151M
IC 753	(B,125,31) IC	NJM4558MD
IC 754	(B,110,48) IC	TC7S14FU
IC 801	(A,144,37) IC	BA6288FS
IC 861	(A,62,95) IC	NJM2872F05
IC 871	(B,55,96) IC	NJM2885DL1-33
Q 101	(A,19,118) Transistor	UMF23N
Q 281	(A,101,92) Transistor	UMH3N
Q 282	(A,104,63) Transistor	UMD3N
Q 291	(A,101,70) Transistor	UMH3N
Q 301	(A,101,81) Transistor	UMH3N
Q 321	(A,152,128) Transistor	IMH23
Q 322	(A,145,124) Transistor	IMH23
Q 323	(A,136,124) Transistor	IMH23

Circuit Symbol and No.		Part No.
Q 324	(A,142,111) Transistor	UMD3N
Q 351	(A,122,121) Transistor	DTC124EUA
Q 391	(A,36,55) Transistor	2SC4081
Q 601	(B,112,61) Transistor	UMD3N
Q 661	(B,152,53) Transistor	2SC4081
Q 721	(A,15,71) Transistor	2SD2396
Q 722	(A,34,69) Transistor	UMD3N
Q 793	(B,108,66) Transistor	2SC4081
Q 794	(A,37,93) Transistor	2SC4081
Q 795	(A,37,87) Transistor	UMD3N
Q 801	(B,148,19) Transistor	2SD1760F5
Q 812	(A,150,15) Transistor	UMD3N
Q 831	(A,65,14) Transistor	2SB710A
Q 832	(B,74,24) Transistor	DTC114EU
Q 841	(A,31,16) Transistor	2SD1760F5
Q 842	(A,35,33) Transistor	UMD3N
Q 851	(B,61,21) Transistor	2SD1767
Q 852	(A,63,6) Transistor	UMD3N
Q 853	(A,129,31) Transistor	2SC4081
Q 901	(A,15,54) Transistor	2SD2396
Q 902	(A,31,47) Transistor	UMD3N
Q 911	(A,15,100) Transistor	2SD2396
Q 912	(A,19,115) Transistor	UMD3N
Q 921	(A,15,84) Transistor	2SD2396
Q 922	(B,21,77) Transistor	UMD3N
Q 931	(A,72,113) Transistor	UMX1N
Q 941	(A,80,113) Transistor	DTC114EU
Q 951	(A,89,118) Transistor	2SA1576
Q 971	(A,48,112) Transistor	UMD3N
Q 972	(A,54,114) Transistor	2SD1859
D 121	(B,126,112) Diode	RB520S-30
D 132	(B,121,109) Diode	1SS355
D 133	(B,121,105) Diode	RB521S-30
D 134	(B,121,107) Diode	RB521S-30
D 281	(A,104,70) Diode	DAN202U
D 321	(A,135,114) Diode	1SS133
D 351	(A,114,127) Diode	MPG06G-6415G50
D 352	(A,114,124) Diode	MPG06G-6415G50
D 391	(A,41,66) Diode	DAN202U
D 392	(A,41,69) Diode	HZU9L(A2)
D 421	(A,158,81) Diode	1SR154-400
D 422	(A,158,85) Diode	1SR154-400
D 423	(A,158,88) Diode	1SR154-400
D 441	(B,36,115) Diode	RSB6R8S
D 442	(B,47,118) Diode	RSB6R8S
D 601	(B,118,58) Diode	DAN202U
D 671	(B,16,137) Diode	DAN202U
D 672	(B,21,137) Diode	DAP202U
D 721	(A,27,69) Diode	HZS9L(A2)
D 751	(B,132,48) Diode Network	DA204U
D 752	(B,123,36) Diode Network	DA204U
D 791	(B,108,70) Diode	HZU6L(B1)
D 794	(A,39,87) Diode	HZU9L(B2)
D 801	(A,145,27) Diode	1SS133
D 802	(A,145,31) Diode	1SS133
D 803	(A,147,20) Diode	HZU7L(B2)
D 811	(B,112,10) Diode	DAN202U
D 812	(B,121,10) Diode	DAP202U
D 813	(A,109,24) Diode	DAN202U
D 814	(A,104,24) Diode	DAP202U
D 815	(B,103,12) Diode	DAN202U
D 816	(B,103,16) Diode	DAP202U
D 817	(B,103,25) Diode	DAN202U
D 818	(B,103,21) Diode	DAP202U
D 841	(A,33,36) Diode	HZS9L(C2)
D 851	(A,64,10) Diode	HZS11L(A1)
D 853	(A,90,10) LED	SML412BC5T(MN)
D 901	(A,33,56) Diode	MPG06G-6415G50
D 902	(A,26,56) Diode	HZS6L(B1)
D 911	(A,11,112) Diode	HZS9L(B2)
D 921	(A,27,80) Diode	HZS9L(B2)
D 931	(A,70,114) Diode	HZU7L(A1)
D 932	(A,66,115) Diode	HZU7L(C3)
D 941	(A,76,112) Diode	1SR154-400
D 951	(A,89,124) Diode	DAN202U
D 971	(A,54,111) Diode	HZS11L(B2)
D 981	(B,85,106) Diode Network	DA204U
D 982	(B,80,114) Diode	HZU7L(C2)
D 991	(A,96,123) Diode	MPG06G-6415G50
D 992	(A,96,118) Diode	MPG06G-6415G50
ZNR401	(A,158,142)Surge Protector	RCCA-201Q31UA-PI
L 101	(B,21,131) Inductor	LCTAW2R2J2520
L 121	(A,114,114) Coil	ATH1176
L 201	(A,53,82) Inductor	CTF1379
L 206	(B,63,80) Inductor	CTF1389
L 208	(A,60,65) Inductor	CTF1389
L 221	(A,81,82) Inductor	CTF1379
L 241	(B,82,49) Inductor	CTF1389
L 261	(A,53,67) Inductor	CTF1379
L 262	(A,93,63) Inductor	CTF1379
L 271	(A,81,67) Inductor	CTF1389
L 272	(A,81,69) Inductor	CTF1379
L 371	(B,94,107) Inductor	CTF1379
L 401	(A,158,102) Inductor	LAU1R0K
L 402	(A,151,103) Ferri-Inductor	LAU100K
L 403	(A,151,111) Inductor	LAU1R0K
L 404	(B,164,146) Chip Coil	LCTAW4R7J2520
L 604	(A,136,87) Ferri-Inductor	LAU100K
L 701	(A,98,24) Inductor	LCTAW2R2J3225
L 831	(A,73,14) Ferri-Inductor	LAU100K
L 841	(A,54,15) Inductor	LAU2R2K
L 872	(A,39,82) Inductor	CTF1617
L 951	(A,84,112) Inductor	LAU2R2K
X 201	(A,56,88)Crystal Resonator 16.934 4 MHz	CSS1052
X 371	(A,85,104)Ceramic Resonator 4.096 MHz	CSS1429
X 601	(A,146,64)Crystal Resonator 20 MHz	VSS1167
VR121	(A,117,109)Semi-fixed 15 kΩ(B)	CCP1397
⚠FU321	(A,133,127) Fuse 3 A	CEK1286
BZ681	(A,149,47) Buzzer	CPV1062
	FM/AM Tuner Unit	CWE1952
M972	Fan Motor	CXM1288

RESISTORS

R 101	(B,24,127)	RS1/16S181J
R 102	(B,33,121)	RS1/16S181J
R 103	(B,24,121)	RS1/16S223J
R 104	(B,30,119)	RS1/16S223J
R 105	(B,26,121)	RS1/16S102J
R 106	(B,28,119)	RS1/16S102J
R 107	(B,36,139)	RS1/16S101J

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
R 108	(B,36,134)	RS1/16S101J	R 284	(A,95,94)	RS1/16S682J
R 109	(B,36,137)	RS1/16S150J	R 285	(A,98,90)	RS1/16S682J
R 110	(B,36,135)	RS1/16S470J	R 286	(A,98,94)	RS1/16S682J
R 111	(B,36,132)	RS1/16S102J	R 287	(B,98,86)	RS1/16S102J
R 112	(A,23,121)	RS1/16S222J	R 288	(B,100,91)	RS1/16S102J
R 113	(A,20,121)	RS1/16S332J	R 289	(B,99,94)	RS1/16S101J
R 114	(A,17,121)	RS1/16S562J	R 290	(B,86,91)	RS1/16S101J
R 122	(A,137,104)	RS1/16S0R0J	R 291	(A,95,70)	RS1/16S473J
R 123	(A,135,100)	RS1/16S0R0J	R 292	(A,95,71)	RS1/16S473J
R 124	(A,135,111)	RS1/16S0R0J	R 293	(A,95,68)	RS1/16S682J
R 125	(A,135,110)	RS1/16S0R0J	R 294	(A,95,73)	RS1/16S682J
R 126	(A,136,106)	RS1/16S0R0J	R 295	(A,98,68)	RS1/16S682J
R 127	(A,135,104)	RS1/16S0R0J	R 296	(A,98,73)	RS1/16S682J
R 128	(A,136,100)	RS1/16S0R0J	R 297	(B,98,65)	RS1/16S102J
R 129	(A,138,98)	RS1/16S0R0J	R 298	(B,101,68)	RS1/16S102J
R 130	(A,138,96)	RS1/16S0R0J	R 299	(B,99,71)	RS1/16S101J
R 131	(A,138,95)	RS1/16S0R0J	R 300	(B,87,67)	RS1/16S101J
R 134	(A,131,110)	RAB4C102J	R 301	(A,95,80)	RS1/16S473J
R 135	(A,121,110)	RS1/16S103J	R 302	(A,95,82)	RS1/16S473J
R 137	(A,103,91)	RS1/16S0R0J	R 303	(A,95,79)	RS1/16S682J
R 138	(A,113,90)	RS1/16S0R0J	R 304	(A,95,83)	RS1/16S682J
R 201	(B,51,85)	RS1/16S104J	R 305	(A,98,79)	RS1/16S682J
R 202	(B,49,85)	RS1/16S104J	R 306	(A,98,83)	RS1/16S682J
R 203	(B,54,76)	RS1/16S153J	R 307	(B,97,76)	RS1/16S102J
R 204	(B,60,81)	RS1/16S222J	R 308	(B,100,80)	RS1/16S102J
R 205	(A,56,65)	RS1/16S681J	R 309	(B,99,83)	RS1/16S101J
R 206	(A,59,84)	RS1/16S101J	R 310	(B,86,79)	RS1/16S101J
R 207	(A,58,65)	RS1/16S681J	R 321	(B,148,125)	RS1/16S470J
R 208	(A,64,83)	RAB4C101J	R 322	(B,146,122)	RS1/16S470J
R 212	(A,66,73)	RS1/16S101J	R 323	(A,155,128)	RS1/16S223J
R 213	(A,66,68)	RS1/16S101J	R 324	(A,151,125)	RS1/16S223J
R 214	(A,64,68)	RS1/16S101J	R 325	(B,142,123)	RS1/16S470J
R 221	(B,75,86)	RS1/16S103J	R 326	(B,137,123)	RS1/16S470J
R 222	(B,75,84)	RS1/16S103J	R 327	(A,148,124)	RS1/16S223J
R 240	(B,80,96)	RS1/16S223J	R 328	(A,142,124)	RS1/16S223J
R 241	(B,80,98)	RS1/16S223J	R 329	(B,133,125)	RS1/16S470J
R 242	(B,81,93)	RS1/16S153J	R 330	(B,133,131)	RS1/16S470J
R 243	(B,64,93)	RS1/16S153J	R 331	(A,139,124)	RS1/16S223J
R 244	(B,69,88)	RS1/16S101J	R 332	(A,131,127)	RS1/16S223J
R 247	(B,72,67)	RS1/16S101J	R 333	(A,142,115)	RS1/16S102J
R 248	(B,76,62)	RS1/16S473J	R 351	(B,97,144)	RS1/16S103J
R 249	(B,74,62)	RS1/16S473J	R 352	(A,122,118)	RS1/16S103J
R 261	(B,55,63)	RS1/16S681J	R 353	(A,122,123)	RS1/16S103J
R 262	(B,55,59)	RS1/16S681J	R 354	(A,119,122)	RS1/16S331J
R 263	(A,66,63)	RAB4C123J	R 371	(B,88,105)	RS1/16S0R0J
R 264	(B,66,60)	RAB4C223J	R 372	(B,98,107)	RS1/16S473J
R 265	(A,101,60)	RS1/16S681J	R 373	(B,128,75)	RS1/16S104J
R 266	(A,88,59)	RS1/16S681J	R 391	(A,36,51)	RS1/16S103J
R 267	(A,88,60)	RS1/16S681J	R 392	(A,37,62)	RS1/16S223J
R 268	(A,100,63)	RS1/16S681J	R 393	(A,36,62)	RS1/16S103J
R 269	(A,99,63)	RS1/16S681J	R 394	(A,34,62)	RS1/16S473J
R 270	(A,97,63)	RS1/16S681J	R 405	(B,164,111)	RS1/16S681J
R 271	(A,75,69)	RS1/16S0R0J	R 406	(B,170,127)	RS1/16S681J
R 273	(A,80,64)	RS1/16S0R0J	R 407	(B,170,129)	RS1/16S681J
R 274	(A,84,69)	RS1/16S0R0J	R 408	(B,170,131)	RS1/16S681J
R 275	(A,88,62)	RS1/16S681J	R 409	(B,170,133)	RS1/16S681J
R 276	(A,90,63)	RS1/16S681J	R 410	(B,171,137)	RS1/16S681J
R 281	(A,95,91)	RS1/16S473J	R 441	(B,41,128)	RS1/16S223J
R 282	(A,95,93)	RS1/16S473J	R 442	(B,48,128)	RS1/16S223J
R 283	(A,95,90)	RS1/16S682J	R 443	(B,41,124)	RS1/16S103J

Circuit Symbol and No.		Part No.
R 444	(B,48,124)	RS1/16S103J
R 445	(B,39,128)	RS1/16S103J
R 446	(B,50,128)	RS1/16S103J
R 447	(A,37,118)	RS1/16S103J
R 448	(A,37,116)	RS1/16S103J
R 449	(A,36,120)	RS1/16S103J
R 450	(A,49,119)	RS1/16S103J
R 451	(A,42,113)	RS1/16S104J
R 452	(A,45,114)	RS1/16S104J
R 601	(B,128,84)	RS1/16S104J
R 603	(B,128,82)	RS1/16S104J
R 604	(A,132,49)	RS1/16S103J
R 605	(B,128,80)	RS1/16S104J
R 606	(A,137,78)	RS1/16S102J
R 607	(B,130,70)	RS1/16S104J
R 608	(A,123,79)	RS1/16S104J
R 609	(A,117,68)	RS1/16S102J
R 611	(B,138,80)	RS1/16S472J
R 613	(B,137,82)	RS1/16S472J
R 615	(B,132,62)	RS1/16S104J
R 616	(B,133,66)	RS1/16S104J
R 617	(A,140,50)	RAB4C104J
R 619	(B,143,63)	RS1/16S0R0J
R 621	(A,116,57)	RAB4C104J
R 625	(A,117,66)	RS1/16S104J
R 627	(A,131,79)	RAB4C681J
R 628	(A,128,78)	RS1/16S681J
R 629	(B,124,75)	RS1/16S681J
R 631	(A,113,61)	RS1/16S104J
R 632	(A,129,49)	RS1/16S104J
R 633	(B,133,54)	RS1/16S104J
R 636	(A,117,54)	RS1/16S0R0J
R 639	(A,114,52)	RS1/16S104J
R 652	(A,146,73)	RS1/16S104J
R 661	(B,152,46)	RS1/16S222J
R 662	(A,150,56)	RS1/16S102J
R 664	(B,152,50)	RS1/16S473J
R 665	(A,153,58)	RS1/16S183J
R 671	(B,10,137)	RS1/16S102J
R 672	(B,12,137)	RS1/16S102J
R 681	(B,147,47)	RS1/16S102J
R 701	(B,93,40)	RS1/16S682J
R 702	(B,93,44)	RS1/16S682J
R 703	(A,95,44)	RS1/16S682J
R 704	(A,95,47)	RS1/16S682J
R 705	(B,93,48)	RS1/16S221J
R 706	(B,105,46)	RS1/16S221J
R 707	(B,93,46)	RS1/16S221J
R 708	(B,105,44)	RS1/16S221J
R 709	(B,93,42)	RS1/16S221J
R 710	(B,105,42)	RS1/16S681J
R 711	(B,103,37)	RS1/16S473J
R 712	(A,114,66)	RS1/16S104J
R 721	(B,21,62)	RS1/4SA391J
R 751	(B,132,36)	RS1/16S393J
R 752	(B,127,48)	RS1/16S104J
R 753	(B,132,38)	RS1/16S472J
R 754	(B,132,34)	RS1/16S471J
R 755	(B,131,45)	RS1/16S273J
R 757	(B,118,28)	RS1/16S104J

Circuit Symbol and No.		Part No.
R 758	(B,116,32)	RS1/16S222J
R 759	(B,117,35)	RS1/16S471J
R 760	(B,117,25)	RS1/16S471J
R 761	(B,112,36)	RS1/16S473J
R 762	(B,109,37)	RS1/16S473J
R 763	(B,116,49)	RS1/16S103J
R 764	(B,127,50)	RS1/16S103J
R 765	(B,109,43)	RS1/16S473J
R 766	(B,109,41)	RS1/16S473J
R 767	(B,118,49)	RS1/16S472J
R 768	(B,115,44)	RS1/16S103J
R 769	(B,121,48)	RS1/16S682J
R 770	(B,133,31)	RS1/16S333J
R 771	(B,133,27)	RS1/16S332J
R 773	(B,114,47)	RS1/16S0R0J
R 774	(B,125,27)	RS1/16S473J
R 775	(B,127,35)	RS1/16S473J
R 776	(B,136,24)	RS1/16S473J
R 777	(B,137,27)	RS1/16S473J
R 791	(B,104,66)	RS1/16S122J
R 793	(A,37,91)	RS1/16S152J
R 801	(A,149,39)	RS1/16S102J
R 802	(A,139,39)	RS1/16S102J
R 803	(B,146,35)	RS1/16S103J
R 804	(B,140,38)	RS1/16S563J
R 806	(B,149,39)	RS1/16S102J
R 807	(A,148,15)	RS1/4SA102J
R 808	(B,149,35)	RS1/16S102J
R 811	(B,107,23)	RS1/16S222J
R 812	(B,109,15)	RS1/16S222J
R 813	(B,107,25)	RS1/16S222J
R 814	(B,112,14)	RS1/16S222J
R 815	(A,113,24)	RS1/16S222J
R 816	(B,115,14)	RS1/16S222J
R 817	(B,118,14)	RS1/16S222J
R 818	(A,115,24)	RS1/16S222J
R 819	(A,117,24)	RS1/16S104J
R 820	(B,104,18)	RS1/16S223J
R 821	(B,107,9)	RS1/16S473J
R 831	(B,67,12)	RS1/16S472J
R 832	(B,69,24)	RS1/16S821J
R 833	(B,77,20)	RS1/16S222J
R 841	(A,36,21)	RS1/16S1R0J
R 842	(A,35,30)	RS1/4SA271J
R 851	(B,60,24)	RS1/16S1R0J
R 852	(B,56,17)	RS1/4SA391J
R 853	(A,131,31)	RS1/16S562J
R 854	(A,129,34)	RS1/16S103J
R 855	(A,87,13)	RS1/16S151J
R 901	(B,19,53)	RS1/16S223J
R 902	(A,33,47)	RS1/16S272J
R 911	(A,19,113)	RS1/16S821J
R 921	(B,14,82)	RS1/16S821J
R 931	(A,66,113)	RS1/16S104J
R 932	(A,72,115)	RS1/16S103J
R 933	(B,67,118)	RS1/16S473J
R 934	(B,65,118)	RS1/16S473J
R 935	(B,69,118)	RS1/16S472J
R 941	(A,79,115)	RS1/16S103J
R 951	(A,89,116)	RS1/16S102J

Circuit Symbol and No.		Part No.
R 952	(A,86,118)	RS1/16S472J
R 953	(A,90,121)	RS1/16S472J
R 954	(A,87,121)	RS1/16S153J
R 971	(A,49,116)	RS1/16S391J
R 972	(B,62,117)	RS1/16S1R0J
R 981	(B,76,109)	RS1/16S102J
R 982	(B,79,108)	RS1/16S153J
R 983	(B,72,115)	RS1/16S102J

CAPACITORS

C 101	(B,31,131)	CKSRYB104K16
C 102	(B,32,141)	CKSRYB102K50
C 103	(B,36,141)	CKSRYB102K50
C 121	(A,111,103)	CKSQYB225K10
C 122	(A,111,101)	CKSQYB225K10
C 123	(A,111,105)	CKSQYB225K10
C 124	(A,111,99)	CKSQYB225K10
C 125	(A,117,103)	CKSRYB105K10
C 126	(A,117,101)	CKSRYB105K10
C 127	(A,117,99)	CKSRYB104K16
C 128	(A,117,98)	CKSRYB104K16
C 129	(A,117,91)	CEJQ4R7M35
C 130	(A,123,91)	CEJQ4R7M35
C 131	(A,114,95)	CKSQYB225K10
C 132	(A,111,110)	CKSYB475K10
C 133	(A,111,108)	CKSYB475K10
C 134	(A,124,110)	CKSRYB105K10
C 135	(A,127,110)	CKSRYB105K10
C 136	(A,119,114)	CEJQ470M10
C 137	(A,126,114)	CEJQ470M10
C 139	(B,116,108)	CKSRYB105K10
C 151	(B,126,110)	CKSRYB105K10
C 201	(B,51,78)	CKSRYB104K16
C 202	(B,53,79)	CKSRYB682K50
C 203	(B,53,73)	CKSRYB104K16
C 204	(B,51,71)	CKSRYB104K16
C 205	(A,48,80)	CEJQ100M16
C 206	(A,48,74)	CEJQ100M16
C 207	(A,48,69)	CEJQ100M16
C 208	(B,56,81)	CKSRYB104K16
C 209	(B,54,84)	CCSRCH8R0D50
C 210	(B,59,73)	CKSRYB104K16
C 211	(B,59,84)	CCSRCH8R0D50
C 212	(B,61,76)	CKSRYB104K16
C 213	(B,61,72)	CKSRYB104K16
C 214	(B,60,79)	CCSRCH680J50
C 215	(B,62,76)	CKSRYB104K16
C 216	(B,66,64)	CCSRCH680J50
C 217	(B,47,85)	CKSYB106K6R3
C 220	(B,62,91)	CKSRYB103K50
C 221	(B,78,83)	CCSRCH101J50
C 224	(A,79,74)	CEVW100M10
C 225	(A,80,80)	CKSRYB104K16
C 226	(A,84,74)	CSZS100M16
C 227	(A,82,80)	CKSRYB104K16
C 228	(A,90,84)	CEVW100M10
C 229	(A,90,78)	CEVW100M10
C 230	(A,90,73)	CEVW100M10
C 231	(A,90,67)	CEVW100M10
C 232	(A,90,95)	CEVW100M10

Circuit Symbol and No.		Part No.
C 233	(A,90,89)	CEVW100M10
C 240	(B,79,93)	CCSRCH220J50
C 241	(B,66,93)	CCSRCH220J50
C 242	(B,83,92)	CKSRYB104K16
C 243	(B,63,68)	CKSRYB332K50
C 244	(A,70,76)	CKSYB106K6R3
C 245	(A,70,71)	CKSYB106K6R3
C 246	(B,55,67)	CKSRYB332K50
C 247	(B,68,83)	CKSYB106K6R3
C 250	(A,71,66)	CKSYB106K6R3
C 251	(A,71,60)	CKSYB106K6R3
C 252	(B,75,45)	CKSRYB104K16
C 261	(A,53,65)	CKSRYB104K16
C 262	(A,95,63)	CKSRYB104K16
C 272	(A,78,66)	CCSRCH560J50
C 273	(A,82,67)	CKSRYB103K50
C 281	(A,95,88)	CCSRCH681J50
C 282	(A,95,96)	CCSRCH681J50
C 283	(A,98,91)	CCSRCH331J50
C 284	(A,98,93)	CCSRCH331J50
C 285	(B,93,86)	CKSRYB105K10
C 286	(B,101,95)	CKSRYB105K10
C 287	(B,92,97)	CKSRYB104K16
C 291	(A,95,67)	CCSRCH681J50
C 292	(A,95,74)	CCSRCH681J50
C 293	(A,98,70)	CCSRCH331J50
C 294	(A,98,71)	CCSRCH331J50
C 295	(B,93,65)	CKSRYB105K10
C 296	(B,101,71)	CKSRYB105K10
C 297	(B,87,73)	CKSRYB104K16
C 301	(A,95,77)	CCSRCH681J50
C 302	(A,95,85)	CCSRCH681J50
C 303	(A,98,80)	CCSRCH331J50
C 304	(A,98,82)	CCSRCH331J50
C 305	(B,93,76)	CKSRYB105K10
C 306	(B,101,83)	CKSRYB105K10
C 307	(B,86,84)	CKSRYB104K16
C 321	(A,151,119)	CEJQNP100M10
C 322	(A,144,119)	CEJQNP100M10
C 323	(A,138,119)	CEJQNP100M10
C 324	(A,131,119)	CEJQNP100M10
C 325	(A,127,124)	CEJQNP100M10
C 326	(A,128,130)	CEJQNP100M10
C 327	(A,151,131)	CKSRYB102K50
C 328	(A,146,112)	CEJQ220M16
C 351	(B,126,120)	CKSQYB474K16
C 352	(B,121,121)	CKSQYB474K16
C 353	(B,124,120)	CKSQYB474K16
C 354	(B,119,121)	CKSQYB474K16
C 355	(A,114,119)	CEJQ330M10
C 357	(A,83,122) 3 300 µF/16 V	CCH1486
C 358	(B,93,137)	CKSRYB104K25
C 359	(A,121,127)	CEHAR100M16
C 360	(A,121,132)	CKSQYB225K10
C 361	(A,123,132)	CKSQYB225K10
C 363	(B,119,137)	CKSRYB474K10
C 364	(B,118,132)	CKSRYB474K10
C 365	(B,119,135)	CKSRYB474K10
C 366	(B,118,130)	CKSRYB474K10
C 371	(B,91,109)	CKSRYB104K16

Circuit Symbol and No.		Part No.
C 372	(B,97,109)	CKSRYB104K16
C 373	(B,96,105)	CKSRYB104K16
C 374	(A,107,113)	CEAL100M16
C 378	(B,95,111)	CKSRYB105K10
C 401	(B,170,106)	CKSRYB103K50
C 402	(B,153,108)	CKSRYB102K50
C 403	(A,158,108)	CEJQ470M10
C 404	(B,164,107)	CKSYB475K10
C 405	(B,171,139)	CKSRYB103K50
C 406	(A,158,115)	CEJQ101M10
C 408	(B,158,111)	CKSRYB102K50
C 421	(A,159,93)	CEJQ220M16
C 422	(B,154,90)	CKSRYB103K50
C 423	(B,153,80)	CKSYB475K10
C 424	(B,132,94)	CKSRYB103K50
C 441	(B,39,124)	CKSQYB225K10
C 442	(B,50,124)	CKSQYB225K10
C 443	(B,40,120)	CKSQYB225K10
C 444	(B,47,120)	CKSQYB225K10
C 445	(A,38,120)	CCSRCH101J50
C 446	(A,48,119)	CCSRCH101J50
C 447	(A,42,115)	CKSRYB105K10
C 448	(A,37,112)	CEVW100M10
C 601	(A,126,80)	CKSRYB104K16
C 602	(A,137,81)	CKSRYB104K16
C 603	(A,121,80)	CKSRYB104K16
C 605	(B,134,86)	CKSRYB103K50
C 606	(A,132,87)	CEJQ4R7M35
C 607	(B,148,65)	CCSRCH7R0D50
C 608	(B,148,61)	CCSRCH7R0D50
C 610	(A,115,62)	CKSRYB104K16
C 611	(A,135,50)	CKSRYB104K16
C 612	(A,131,51)	CKSRYB104K16
C 613	(B,131,75)	CCSRCH331J50
C 662	(B,152,48)	CKSRYB104K16
C 663	(A,153,56)	CKSRYB105K10
C 721	(B,27,71)	CKSRYB473K25
C 722	(B,26,64)	CKSRYB102K50
C 723	(A,26,62)	CEJQ101M10
C 743	(A,93,51)	CEJQ101M10
C 751	(A,136,38)	CEJQ4R7M35
C 752	(A,136,43)	CEJQ1R0M50
C 753	(A,136,32)	CEJQ4R7M35
C 754	(B,109,35)	CKSRYB104K16
C 755	(B,116,28)	CKSRYB102K50
C 756	(B,118,32)	CCSRCH101J50
C 758	(B,131,27)	CKSRYB105K10
C 759	(B,121,50)	CKSRYB104K16
C 760	(B,120,36)	CKSRYB104K16
C 761	(B,125,25)	CKSRYB104K16
C 762	(B,115,42)	CKSRYB472K50
C 763	(B,117,46)	CKSRYB102K50
C 764	(B,109,45)	CKSRYB104K16
C 765	(B,131,31)	CKSRYB471K50
C 768	(B,135,27)	CKSRYB104K16
C 769	(B,72,109)	CKSRYB153K50
C 791	(B,112,68)	CKSRYB103K50
C 796	(A,41,87)	CKSRYB103K50
C 801	(B,140,40)	CKSRYB103K50
C 802	(B,151,29)	CKSRYB102K50

Circuit Symbol and No.		Part No.
C 803	(A,139,34)	CCSRCH101J50
C 804	(A,149,34)	CCSRCH101J50
C 806	(B,153,24)	CKSRYB102K50
C 807	(A,154,17)	CKSRYB104K16
C 808	(A,152,21)	CEVW220M16
C 831	(B,77,18)	CKSRYB104K16
C 832	(A,73,8)	CEVW470M10
C 841	(A,54,9)	CEVW470M16
C 842	(B,35,34)	CKSRYB104K16
C 843	(B,34,28)	CKSRYB102K50
C 844	(A,34,26)	CEJQ330M16
C 851	(B,62,12)	CKSRYB473K25
C 852	(A,90,13)	CKSRYB104K16
C 861	(A,59,94)	CKSRYB105K6R3
C 862	(A,59,96)	CKSRYB103K50
C 863	(A,65,95)	CKSRYB104K16
C 871	(A,41,72)	CKSRYB104K16
C 873	(A,38,76)	CEVW101M6R3
C 875	(A,36,82)	CKSRYB105K10
C 877	(A,46,96)	CEVW101M6R3
C 878	(A,53,97)	CKSRYB103K50
C 879	(B,46,95)	CKSYB475K10
C 901	(A,24,44) 2 200 µF/16 V	CCH1405
C 903	(B,25,59)	CKSRYB472K50
C 904	(B,25,49)	CKSRYB103K50
C 905	(A,25,51)	CEJQ470M10
C 911	(A,30,106)	CEJQ221M10
C 912	(B,11,114)	CKSRYB103K50
C 913	(A,11,117)	CEJQ101M10
C 921	(A,29,96) 470 µF/16 V	CCH1325
C 922	(B,27,78)	CKSRYB103K50
C 923	(A,27,74)	CEJQ101M10
C 932	(B,71,118)	CKSRYB104K16
C 941	(A,80,111)	CKSQYB105K16
C 963	(A,74,132)	CKSQYB105K10
C 964	(B,71,129)	CKSQYB105K16
C 965	(B,69,129)	CKSQYB105K16
C 966	(B,70,142)	CKSQYB105K16
C 967	(A,71,132)	CKSQYB105K16
C 968	(A,69,132)	CKSQYB105K16
C 969	(A,66,132)	CKSQYB105K16
C 971	(B,60,109)	CKSRYB103K50
C 972	(B,59,113)	CKSRYB103K50
C 973	(A,61,113)	CEJQ100M16
C 981	(B,79,110)	CKSRYB104K16

A

Unit Number : CWN1439(DEH-P8850MP/XN/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC 101	(B,28,137) IC	HA12241FP
IC 121	(A,126,101) IC	PM9009A
IC 201	(A,58,74) IC	AK7732VT
IC 221	(A,73,83) IC	PCM1606EG
IC 240	(B,73,93) IC	NJM4558MD
IC 241	(B,75,50) IC	NJM4558MD
IC 261	(A,55,61) IC	TC74VHCT08AFTS1
IC 262	(A,94,59) IC	TC74VHC08FTS1
IC 271	(A,78,68) IC	TC7SH08FUS1

Circuit Symbol and No.		Part No.
IC 281	(B,93,93) IC	NJM4558MD
IC 282	(B,93,71) IC	NJM4558MD
IC 283	(B,93,82) IC	NJM4558MD
IC 351	(A,100,136) IC	PAL007B
IC 371	(A,96,107) IC	PM8003A
IC 421	(B,157,85) IC	NJM2885DL1-33
IC 441	(A,43,119) IC	NJM4558MD
IC 601	(A,130,64) IC	PEG175A
IC 661	(A,152,63) IC	S-80835CNUA-B8U
IC 751	(B,110,31) IC	NJM4558MD
IC 752	(B,124,44) IC	NJM4151M
IC 753	(B,125,31) IC	NJM4558MD
IC 754	(B,110,48) IC	TC7S14FU
IC 801	(A,144,37) IC	BA6288FS
IC 861	(A,62,95) IC	NJM2872F05
IC 871	(B,55,96) IC	NJM2885DL1-33
Q 101	(A,19,118) Transistor	UMF23N
Q 181	(A,102,117) Transistor	2SC3052-12
Q 182	(A,106,127) Transistor	UMD3N
Q 183	(B,112,90) Transistor	2SC4081
Q 281	(A,101,92) Transistor	UMH3N
Q 282	(A,104,63) Transistor	UMD3N
Q 291	(A,101,70) Transistor	UMH3N
Q 301	(A,101,81) Transistor	UMH3N
Q 321	(A,152,128) Transistor	IMH23
Q 322	(A,145,124) Transistor	IMH23
Q 323	(A,136,124) Transistor	IMH23
Q 324	(A,142,111) Transistor	UMD3N
Q 351	(A,122,121) Transistor	DTC124EUA
Q 391	(A,36,55) Transistor	2SC4081
Q 601	(B,112,61) Transistor	UMD3N
Q 661	(B,152,53) Transistor	2SC4081
Q 721	(A,15,71) Transistor	2SD2396
Q 722	(A,34,69) Transistor	UMD3N
Q 793	(B,108,66) Transistor	2SC4081
Q 794	(A,37,93) Transistor	2SC4081
Q 795	(A,37,87) Transistor	UMD3N
Q 801	(B,148,19) Transistor	2SD1760F5
Q 812	(A,150,15) Transistor	UMD3N
Q 831	(A,65,14) Transistor	2SB710A
Q 832	(B,74,24) Transistor	DTC114EU
Q 841	(A,31,16) Transistor	2SD1760F5
Q 842	(A,35,33) Transistor	UMD3N
Q 851	(B,61,21) Transistor	2SD1767
Q 852	(A,63,6) Transistor	UMD3N
Q 853	(A,129,31) Transistor	2SC4081
Q 901	(A,15,54) Transistor	2SD2396
Q 902	(A,31,47) Transistor	UMD3N
Q 911	(A,15,100) Transistor	2SD2396
Q 912	(A,19,115) Transistor	UMD3N
Q 921	(A,15,84) Transistor	2SD2396
Q 922	(B,21,77) Transistor	UMD3N
Q 931	(A,72,113) Transistor	UMX1N
Q 941	(A,80,113) Transistor	DTC114EU
Q 951	(A,89,118) Transistor	2SA1576
Q 971	(A,48,112) Transistor	UMD3N
Q 972	(A,54,114) Transistor	2SD1859
D 121	(B,126,112) Diode	RB520S-30
D 132	(B,121,109) Diode	1SS355
D 133	(B,121,105) Diode	RB521S-30

Circuit Symbol and No.		Part No.
D 134	(B,121,107) Diode	RB521S-30
D 181	(A,104,124) Diode	HZU3R9(B1)
D 281	(A,104,70) Diode	DAN202U
D 321	(A,135,114) Diode	1SS133
D 351	(A,114,127) Diode	MPG06G-6415G50
D 352	(A,114,124) Diode	MPG06G-6415G50
D 391	(A,41,66) Diode	DAN202U
D 392	(A,41,69) Diode	HZU9L(A2)
D 421	(A,158,81) Diode	1SR154-400
D 422	(A,158,85) Diode	1SR154-400
D 423	(A,158,88) Diode	1SR154-400
D 431	(A,30,122) Diode	RSB6R8S
D 441	(B,36,115) Diode	RSB6R8S
D 442	(B,47,118) Diode	RSB6R8S
D 601	(B,118,58) Diode	DAN202U
D 721	(A,27,69) Diode	HZS9L(A2)
D 751	(B,132,48) Diode Network	DA204U
D 752	(B,123,36) Diode Network	DA204U
D 791	(B,108,70) Diode	HZU6L(B1)
D 794	(A,39,87) Diode	HZU9L(B2)
D 801	(A,145,27) Diode	1SS133
D 802	(A,145,31) Diode	1SS133
D 803	(A,147,20) Diode	HZU7L(B2)
D 811	(B,112,10) Diode	DAN202U
D 812	(B,121,10) Diode	DAP202U
D 813	(A,109,24) Diode	DAN202U
D 814	(A,104,24) Diode	DAP202U
D 815	(B,103,12) Diode	DAN202U
D 816	(B,103,16) Diode	DAP202U
D 817	(B,103,25) Diode	DAN202U
D 818	(B,103,21) Diode	DAP202U
D 841	(A,33,36) Diode	HZS9L(C2)
D 851	(A,64,10) Diode	HZS11L(A1)
D 853	(A,90,10) LED	SML412BC5T(MN)
D 901	(A,33,56) Diode	MPG06G-6415G50
D 902	(A,26,56) Diode	HZS6L(B1)
D 911	(A,11,112) Diode	HZS9L(B2)
D 921	(A,27,80) Diode	HZS9L(B2)
D 931	(A,70,114) Diode	HZU7L(A1)
D 932	(A,66,115) Diode	HZU7L(C3)
D 941	(A,76,112) Diode	1SR154-400
D 951	(A,89,124) Diode	DAN202U
D 971	(A,54,111) Diode	HZS11L(B2)
D 981	(B,85,106) Diode Network	DA204U
D 982	(B,80,114) Diode	HZU7L(C2)
D 991	(A,96,123) Diode	MPG06G-6415G50
D 992	(A,96,118) Diode	MPG06G-6415G50
ZNR401	(A,158,142)Surge Protector	RCCA-201Q31UA-PI
L 101	(B,21,131) Inductor	LCTAW2R2J2520
L 121	(A,114,114) Coil	ATH1176
L 201	(A,53,82) Inductor	CTF1379
L 206	(B,63,80) Inductor	CTF1389
L 208	(A,60,65) Inductor	CTF1389
L 221	(A,81,82) Inductor	CTF1379
L 241	(B,82,49) Inductor	CTF1389
L 261	(A,53,67) Inductor	CTF1379
L 262	(A,93,63) Inductor	CTF1379
L 271	(A,81,67) Inductor	CTF1389
L 272	(A,81,69) Inductor	CTF1379
L 371	(B,94,107) Inductor	CTF1379

Circuit Symbol and No.		Part No.
L 401	(A,158,102) Inductor	LAU1R0K
L 402	(A,151,103) Ferri-Inductor	LAU100K
L 403	(A,151,111) Inductor	LAU1R0K
L 404	(B,164,146) Chip Coil	LCTAW4R7J2520
L 604	(A,136,87) Ferri-Inductor	LAU100K
L 701	(A,98,24) Inductor	LCTAW2R2J3225
L 831	(A,73,14) Ferri-Inductor	LAU100K
L 841	(A,54,15) Inductor	LAU2R2K
L 872	(A,39,82) Inductor	CTF1617
L 951	(A,84,112) Inductor	LAU2R2K
X 201	(A,56,88)Crystal Resonator 16.934 4 MHz	CSS1052
X 371	(A,85,104)Ceramic Resonator 4.096 MHz	CSS1429
X 601	(A,146,64)Crystal Resonator 20 MHz	VSS1167
VR121	(A,117,109)Semi-fixed 15 kΩ(B)	CCP1397
⚠FU321	(A,133,127) Fuse 3 A	CEK1286
BZ681	(A,149,47) Buzzer	CPV1062
	FM/AM Tuner Unit	CWE1952
M972	Fan Motor	CXM1288

RESISTORS

Circuit Symbol and No.		Part No.
R 101	(B,24,127)	RS1/16S181J
R 102	(B,33,121)	RS1/16S181J
R 103	(B,24,121)	RS1/16S223J
R 104	(B,30,119)	RS1/16S223J
R 105	(B,26,121)	RS1/16S102J
R 106	(B,28,119)	RS1/16S102J
R 107	(B,36,139)	RS1/16S101J
R 108	(B,36,134)	RS1/16S101J
R 109	(B,36,137)	RS1/16S150J
R 110	(B,36,135)	RS1/16S470J
R 111	(B,36,132)	RS1/16S102J
R 112	(A,23,121)	RS1/16S222J
R 113	(A,20,121)	RS1/16S332J
R 114	(A,17,121)	RS1/16S562J
R 122	(A,137,104)	RS1/16S0R0J
R 123	(A,135,100)	RS1/16S0R0J
R 124	(A,135,111)	RS1/16S0R0J
R 125	(A,135,110)	RS1/16S0R0J
R 126	(A,136,106)	RS1/16S0R0J
R 127	(A,135,104)	RS1/16S0R0J
R 128	(A,136,100)	RS1/16S0R0J
R 129	(A,138,98)	RS1/16S0R0J
R 130	(A,138,96)	RS1/16S0R0J
R 131	(A,138,95)	RS1/16S0R0J
R 134	(A,131,110)	RAB4C102J
R 135	(A,121,110)	RS1/16S103J
R 137	(A,103,91)	RS1/16S0R0J
R 138	(A,113,90)	RS1/16S0R0J
R 181	(A,99,127)	RS1/16S104J
R 182	(B,108,122)	RS1/16S683J
R 183	(A,96,127)	RS1/16S153J
R 184	(B,113,122)	RS1/16S682J
R 185	(A,101,121)	RS1/16S152J
R 186	(A,101,127)	RS1/16S222J
R 187	(A,103,127)	RS1/16S561J
R 188	(A,108,127)	RS1/16S473J
R 189	(B,104,94)	RS1/16S103J
R 190	(B,108,94)	RS1/16S223J
R 191	(B,112,94)	RS1/16S104J
R 201	(B,51,85)	RS1/16S104J
R 202	(B,49,85)	RS1/16S104J
R 203	(B,54,76)	RS1/16S153J
R 204	(B,60,81)	RS1/16S222J
R 205	(A,56,65)	RS1/16S681J
R 206	(A,59,84)	RS1/16S101J
R 207	(A,58,65)	RS1/16S681J
R 208	(A,64,83)	RAB4C101J
R 212	(A,66,73)	RS1/16S101J
R 213	(A,66,68)	RS1/16S101J
R 214	(A,64,68)	RS1/16S101J
R 221	(B,75,86)	RS1/16S103J
R 222	(B,75,84)	RS1/16S103J
R 240	(B,80,96)	RS1/16S223J
R 241	(B,80,98)	RS1/16S223J
R 242	(B,81,93)	RS1/16S153J
R 243	(B,64,93)	RS1/16S153J
R 244	(B,69,88)	RS1/16S101J
R 247	(B,72,67)	RS1/16S101J
R 248	(B,76,62)	RS1/16S473J
R 249	(B,74,62)	RS1/16S473J
R 261	(B,55,63)	RS1/16S681J
R 262	(B,55,59)	RS1/16S681J
R 263	(A,66,63)	RAB4C123J
R 264	(B,66,60)	RAB4C223J
R 265	(A,101,60)	RS1/16S681J
R 266	(A,88,59)	RS1/16S681J
R 267	(A,88,60)	RS1/16S681J
R 268	(A,100,63)	RS1/16S681J
R 269	(A,99,63)	RS1/16S681J
R 270	(A,97,63)	RS1/16S681J
R 271	(A,75,69)	RS1/16S0R0J
R 273	(A,80,64)	RS1/16S0R0J
R 274	(A,84,69)	RS1/16S0R0J
R 275	(A,88,62)	RS1/16S681J
R 276	(A,90,63)	RS1/16S681J
R 281	(A,95,91)	RS1/16S473J
R 282	(A,95,93)	RS1/16S473J
R 283	(A,95,90)	RS1/16S682J
R 284	(A,95,94)	RS1/16S682J
R 285	(A,98,90)	RS1/16S682J
R 286	(A,98,94)	RS1/16S682J
R 287	(B,98,86)	RS1/16S102J
R 288	(B,100,91)	RS1/16S102J
R 289	(B,99,94)	RS1/16S101J
R 290	(B,86,91)	RS1/16S101J
R 291	(A,95,70)	RS1/16S473J
R 292	(A,95,71)	RS1/16S473J
R 293	(A,95,68)	RS1/16S682J
R 294	(A,95,73)	RS1/16S682J
R 295	(A,98,68)	RS1/16S682J
R 296	(A,98,73)	RS1/16S682J
R 297	(B,98,65)	RS1/16S102J
R 298	(B,101,68)	RS1/16S102J
R 299	(B,99,71)	RS1/16S101J
R 300	(B,87,67)	RS1/16S101J
R 301	(A,95,80)	RS1/16S473J
R 302	(A,95,82)	RS1/16S473J
R 303	(A,95,79)	RS1/16S682J
R 304	(A,95,83)	RS1/16S682J
R 305	(A,98,79)	RS1/16S682J

Circuit Symbol and No.		Part No.	Circuit Symbol and No.		Part No.
R 306	(A,98,83)	RS1/16S682J	R 617	(A,140,50)	RAB4C104J
R 307	(B,97,76)	RS1/16S102J	R 619	(B,143,63)	RS1/16S0R0J
R 308	(B,100,80)	RS1/16S102J	R 621	(A,116,57)	RAB4C104J
R 309	(B,99,83)	RS1/16S101J	R 625	(A,117,66)	RS1/16S104J
R 310	(B,86,79)	RS1/16S101J	R 627	(A,131,79)	RAB4C681J
R 321	(B,148,125)	RS1/16S470J	R 628	(A,128,78)	RS1/16S681J
R 322	(B,146,122)	RS1/16S470J	R 629	(B,124,75)	RS1/16S681J
R 323	(A,155,128)	RS1/16S223J	R 631	(A,113,61)	RS1/16S104J
R 324	(A,151,125)	RS1/16S223J	R 632	(A,129,49)	RS1/16S104J
R 325	(B,142,123)	RS1/16S470J	R 633	(B,133,54)	RS1/16S104J
R 326	(B,137,123)	RS1/16S470J	R 639	(A,114,52)	RS1/16S104J
R 327	(A,148,124)	RS1/16S223J	R 652	(A,146,73)	RS1/16S104J
R 328	(A,142,124)	RS1/16S223J	R 661	(B,152,46)	RS1/16S222J
R 329	(B,133,125)	RS1/16S470J	R 662	(A,150,56)	RS1/16S102J
R 330	(B,133,131)	RS1/16S470J	R 664	(B,152,50)	RS1/16S473J
R 331	(A,139,124)	RS1/16S223J	R 665	(A,153,58)	RS1/16S183J
R 332	(A,131,127)	RS1/16S223J	R 681	(B,147,47)	RS1/16S102J
R 333	(A,142,115)	RS1/16S102J	R 701	(B,93,40)	RS1/16S682J
R 351	(B,97,144)	RS1/16S103J	R 702	(B,93,44)	RS1/16S682J
R 352	(A,122,118)	RS1/16S103J	R 703	(A,95,44)	RS1/16S682J
R 353	(A,122,123)	RS1/16S103J	R 704	(A,95,47)	RS1/16S682J
R 354	(A,119,122)	RS1/16S331J	R 705	(B,93,48)	RS1/16S221J
R 371	(B,88,105)	RS1/16S0R0J	R 706	(B,105,46)	RS1/16S221J
R 372	(B,98,107)	RS1/16S473J	R 707	(B,93,46)	RS1/16S221J
R 373	(B,128,75)	RS1/16S104J	R 708	(B,105,44)	RS1/16S221J
R 391	(A,36,51)	RS1/16S103J	R 709	(B,93,42)	RS1/16S221J
R 392	(A,37,62)	RS1/16S223J	R 710	(B,105,42)	RS1/16S681J
R 393	(A,36,62)	RS1/16S103J	R 711	(B,103,37)	RS1/16S473J
R 394	(A,34,62)	RS1/16S473J	R 712	(A,114,66)	RS1/16S104J
R 405	(B,164,111)	RS1/16S681J	R 721	(B,21,62)	RS1/4SA391J
R 406	(B,170,127)	RS1/16S681J	R 751	(B,132,36)	RS1/16S393J
R 407	(B,170,129)	RS1/16S681J	R 752	(B,127,48)	RS1/16S104J
R 408	(B,170,131)	RS1/16S681J	R 753	(B,132,38)	RS1/16S472J
R 409	(B,170,133)	RS1/16S681J	R 754	(B,132,34)	RS1/16S471J
R 410	(B,171,137)	RS1/16S681J	R 755	(B,131,45)	RS1/16S273J
R 435	(A,32,111)	RS1/16S0R0J	R 757	(B,118,28)	RS1/16S104J
R 436	(A,48,102)	RS1/16S0R0J	R 758	(B,116,32)	RS1/16S222J
R 441	(B,41,128)	RS1/16S223J	R 759	(B,117,35)	RS1/16S471J
R 442	(B,48,128)	RS1/16S223J	R 760	(B,117,25)	RS1/16S471J
R 443	(B,41,124)	RS1/16S103J	R 761	(B,112,36)	RS1/16S473J
R 444	(B,48,124)	RS1/16S103J	R 762	(B,109,37)	RS1/16S473J
R 445	(B,39,128)	RS1/16S103J	R 763	(B,116,49)	RS1/16S103J
R 446	(B,50,128)	RS1/16S103J	R 764	(B,127,50)	RS1/16S103J
R 447	(A,37,118)	RS1/16S103J	R 765	(B,109,43)	RS1/16S473J
R 448	(A,37,116)	RS1/16S103J	R 766	(B,109,41)	RS1/16S473J
R 449	(A,36,120)	RS1/16S103J	R 767	(B,118,49)	RS1/16S472J
R 450	(A,49,119)	RS1/16S103J	R 768	(B,115,44)	RS1/16S103J
R 451	(A,42,113)	RS1/16S104J	R 769	(B,121,48)	RS1/16S682J
R 452	(A,45,114)	RS1/16S104J	R 770	(B,133,31)	RS1/16S333J
R 601	(B,128,84)	RS1/16S104J	R 771	(B,133,27)	RS1/16S332J
R 603	(B,128,82)	RS1/16S104J	R 773	(B,114,47)	RS1/16S0R0J
R 605	(B,128,80)	RS1/16S104J	R 774	(B,125,27)	RS1/16S473J
R 606	(A,137,78)	RS1/16S102J	R 775	(B,127,35)	RS1/16S473J
R 607	(B,130,70)	RS1/16S104J	R 776	(B,136,24)	RS1/16S473J
R 608	(A,123,79)	RS1/16S104J	R 777	(B,137,27)	RS1/16S473J
R 609	(A,117,68)	RS1/16S102J	R 791	(B,104,66)	RS1/16S122J
R 611	(B,138,80)	RS1/16S472J	R 793	(A,37,91)	RS1/16S152J
R 613	(B,137,82)	RS1/16S472J	R 801	(A,149,39)	RS1/16S102J
R 615	(B,132,62)	RS1/16S104J	R 802	(A,139,39)	RS1/16S102J
R 616	(B,133,66)	RS1/16S104J	R 803	(B,146,35)	RS1/16S103J

Circuit Symbol and No.		Part No.
R 804	(B,140,38)	RS1/16S563J
R 806	(B,149,39)	RS1/16S102J
R 807	(A,148,15)	RS1/4SA102J
R 808	(B,149,35)	RS1/16S102J
R 811	(B,107,23)	RS1/16S222J
R 812	(B,109,15)	RS1/16S222J
R 813	(B,107,25)	RS1/16S222J
R 814	(B,112,14)	RS1/16S222J
R 815	(A,113,24)	RS1/16S222J
R 816	(B,115,14)	RS1/16S222J
R 817	(B,118,14)	RS1/16S222J
R 818	(A,115,24)	RS1/16S222J
R 819	(A,117,24)	RS1/16S104J
R 820	(B,104,18)	RS1/16S223J
R 821	(B,107,9)	RS1/16S473J
R 831	(B,67,12)	RS1/16S472J
R 832	(B,69,24)	RS1/16S821J
R 833	(B,77,20)	RS1/16S222J
R 841	(A,36,21)	RS1/16S1R0J
R 842	(A,35,30)	RS1/4SA271J
R 851	(B,60,24)	RS1/16S1R0J
R 852	(B,56,17)	RS1/4SA391J
R 853	(A,131,31)	RS1/16S562J
R 854	(A,129,34)	RS1/16S103J
R 855	(A,87,13)	RS1/16S151J
R 901	(B,19,53)	RS1/16S223J
R 902	(A,33,47)	RS1/16S272J
R 911	(A,19,113)	RS1/16S821J
R 921	(B,14,82)	RS1/16S821J
R 931	(A,66,113)	RS1/16S104J
R 932	(A,72,115)	RS1/16S103J
R 933	(B,67,118)	RS1/16S473J
R 934	(B,65,118)	RS1/16S473J
R 935	(B,69,118)	RS1/16S472J
R 941	(A,79,115)	RS1/16S103J
R 951	(A,89,116)	RS1/16S102J
R 952	(A,86,118)	RS1/16S472J
R 953	(A,90,121)	RS1/16S472J
R 954	(A,87,121)	RS1/16S153J
R 971	(A,49,116)	RS1/16S391J
R 972	(B,62,117)	RS1/16S1R0J
R 981	(B,76,109)	RS1/16S102J
R 982	(B,79,108)	RS1/16S153J
R 983	(B,72,115)	RS1/16S102J

CAPACITORS

C 101	(B,31,131)	CKSRYB104K16
C 102	(B,32,141)	CKSRYB102K50
C 103	(B,36,141)	CKSRYB102K50
C 121	(A,111,103)	CKSQYB225K10
C 122	(A,111,101)	CKSQYB225K10
C 123	(A,111,105)	CKSQYB225K10
C 124	(A,111,99)	CKSQYB225K10
C 125	(A,117,103)	CKSRYB105K10
C 126	(A,117,101)	CKSRYB105K10
C 127	(A,117,99)	CKSRYB104K16
C 128	(A,117,98)	CKSRYB104K16
C 129	(A,117,91)	CEJQ4R7M35
C 130	(A,123,91)	CEJQ4R7M35
C 131	(A,114,95)	CKSQYB225K10
C 132	(A,111,110)	CKSYB475K10
C 133	(A,111,108)	CKSYB475K10
C 134	(A,124,110)	CKSRYB105K10
C 135	(A,127,110)	CKSRYB105K10
C 136	(A,119,114)	CEJQ470M10
C 137	(A,126,114)	CEJQ470M10
C 139	(B,116,108)	CKSRYB105K10
C 151	(B,126,110)	CKSRYB105K10
C 181	(A,98,127)	CCSRCH681J50
C 182	(A,103,121)	CKSQYB225K10
C 183	(A,108,120)	CEJQ101M6R3
C 201	(B,51,78)	CKSRYB104K16
C 202	(B,53,79)	CKSRYB682K50
C 203	(B,53,73)	CKSRYB104K16
C 204	(B,51,71)	CKSRYB104K16
C 205	(A,48,80)	CEJQ100M16
C 206	(A,48,74)	CEJQ100M16
C 207	(A,48,69)	CEJQ100M16
C 208	(B,56,81)	CKSRYB104K16
C 209	(B,54,84)	CCSRCH8R0D50
C 210	(B,59,73)	CKSRYB104K16
C 211	(B,59,84)	CCSRCH8R0D50
C 212	(B,61,76)	CKSRYB104K16
C 213	(B,61,72)	CKSRYB104K16
C 214	(B,60,79)	CCSRCH680J50
C 215	(B,62,76)	CKSRYB104K16
C 216	(B,66,64)	CCSRCH680J50
C 217	(B,47,85)	CKSYB106K6R3
C 220	(B,62,91)	CKSRYB103K50
C 221	(B,78,83)	CCSRCH101J50
C 224	(A,79,74)	CEVW100M10
C 225	(A,80,80)	CKSRYB104K16
C 226	(A,84,74)	CSZS100M16
C 227	(A,82,80)	CKSRYB104K16
C 228	(A,90,84)	CEVW100M10
C 229	(A,90,78)	CEVW100M10
C 230	(A,90,73)	CEVW100M10
C 231	(A,90,67)	CEVW100M10
C 232	(A,90,95)	CEVW100M10
C 233	(A,90,89)	CEVW100M10
C 240	(B,79,93)	CCSRCH220J50
C 241	(B,66,93)	CCSRCH220J50
C 242	(B,83,92)	CKSRYB104K16
C 243	(B,63,68)	CKSRYB332K50
C 244	(A,70,76)	CKSYB106K6R3
C 245	(A,70,71)	CKSYB106K6R3
C 246	(B,55,67)	CKSRYB332K50
C 247	(B,68,83)	CKSYB106K6R3
C 250	(A,71,66)	CKSYB106K6R3
C 251	(A,71,60)	CKSYB106K6R3
C 252	(B,75,45)	CKSRYB104K16
C 261	(A,53,65)	CKSRYB104K16
C 262	(A,95,63)	CKSRYB104K16
C 272	(A,78,66)	CCSRCH560J50
C 273	(A,82,67)	CKSRYB103K50
C 281	(A,95,88)	CCSRCH681J50
C 282	(A,95,96)	CCSRCH681J50
C 283	(A,98,91)	CCSRCH331J50
C 284	(A,98,93)	CCSRCH331J50
C 285	(B,93,86)	CKSRYB105K10

Circuit Symbol and No.		Part No.
C 286	(B,101,95)	CKSRYB105K10
C 287	(B,92,97)	CKSRYB104K16
C 291	(A,95,67)	CCSRCH681J50
C 292	(A,95,74)	CCSRCH681J50
C 293	(A,98,70)	CCSRCH331J50
C 294	(A,98,71)	CCSRCH331J50
C 295	(B,93,65)	CKSRYB105K10
C 296	(B,101,71)	CKSRYB105K10
C 297	(B,87,73)	CKSRYB104K16
C 301	(A,95,77)	CCSRCH681J50
C 302	(A,95,85)	CCSRCH681J50
C 303	(A,98,80)	CCSRCH331J50
C 304	(A,98,82)	CCSRCH331J50
C 305	(B,93,76)	CKSRYB105K10
C 306	(B,101,83)	CKSRYB105K10
C 307	(B,86,84)	CKSRYB104K16
C 321	(A,151,119)	CEJQNP100M10
C 322	(A,144,119)	CEJQNP100M10
C 323	(A,138,119)	CEJQNP100M10
C 324	(A,131,119)	CEJQNP100M10
C 325	(A,127,124)	CEJQNP100M10
C 326	(A,128,130)	CEJQNP100M10
C 327	(A,151,131)	CKSRYB102K50
C 328	(A,146,112)	CEJQ220M16
C 351	(B,126,120)	CKSQYB474K16
C 352	(B,121,121)	CKSQYB474K16
C 353	(B,124,120)	CKSQYB474K16
C 354	(B,119,121)	CKSQYB474K16
C 355	(A,114,119)	CEJQ330M10
C 357	(A,83,122) 3 300 µF/16 V	CCH1486
C 358	(B,93,137)	CKSRYB104K25
C 359	(A,121,127)	CEHAR100M16
C 360	(A,121,132)	CKSQYB225K10
C 361	(A,123,132)	CKSQYB225K10
C 363	(B,119,137)	CKSRYB474K10
C 364	(B,118,132)	CKSRYB474K10
C 365	(B,119,135)	CKSRYB474K10
C 366	(B,118,130)	CKSRYB474K10
C 371	(B,91,109)	CKSRYB104K16
C 372	(B,97,109)	CKSRYB104K16
C 373	(B,96,105)	CKSRYB104K16
C 374	(A,107,113)	CEAL100M16
C 378	(B,95,111)	CKSRYB105K10
C 401	(B,170,106)	CKSRYB103K50
C 402	(B,153,108)	CKSRYB102K50
C 403	(A,158,108)	CEJQ470M10
C 404	(B,164,107)	CKSYB475K10
C 405	(B,171,139)	CKSRYB103K50
C 406	(A,158,115)	CEJQ101M10
C 408	(B,158,111)	CKSRYB102K50
C 421	(A,159,93)	CEJQ220M16
C 422	(B,154,90)	CKSRYB103K50
C 423	(B,153,80)	CKSYB475K10
C 424	(B,132,94)	CKSRYB103K50
C 432	(A,30,114)	CKSQYB105K16
C 433	(A,33,115)	CKSQYB105K16
C 441	(B,39,124)	CKSQYB225K10
C 442	(B,50,124)	CKSQYB225K10
C 443	(B,40,120)	CKSQYB225K10
C 444	(B,47,120)	CKSQYB225K10

Circuit Symbol and No.		Part No.
C 445	(A,38,120)	CCSRCH101J50
C 446	(A,48,119)	CCSRCH101J50
C 447	(A,42,115)	CKSRYB105K10
C 448	(A,37,112)	CEVW100M10
C 560	(B,43,51)	CKSRYB102K50
C 601	(A,126,80)	CKSRYB104K16
C 602	(A,137,81)	CKSRYB104K16
C 603	(A,121,80)	CKSRYB104K16
C 605	(B,134,86)	CKSRYB103K50
C 606	(A,132,87)	CEJQ4R7M35
C 607	(B,148,65)	CCSRCH7R0D50
C 608	(B,148,61)	CCSRCH7R0D50
C 610	(A,115,62)	CKSRYB104K16
C 611	(A,135,50)	CKSRYB104K16
C 612	(A,131,51)	CKSRYB104K16
C 613	(B,131,75)	CCSRCH331J50
C 662	(B,152,48)	CKSRYB104K16
C 663	(A,153,56)	CKSRYB105K10
C 721	(B,27,71)	CKSRYB473K25
C 722	(B,26,64)	CKSRYB102K50
C 723	(A,26,62)	CEJQ101M10
C 743	(A,93,51)	CEJQ101M10
C 751	(A,136,38)	CEJQ4R7M35
C 752	(A,136,43)	CEJQ1R0M50
C 753	(A,136,32)	CEJQ4R7M35
C 754	(B,109,35)	CKSRYB104K16
C 755	(B,116,28)	CKSRYB102K50
C 756	(B,118,32)	CCSRCH101J50
C 758	(B,131,27)	CKSRYB105K10
C 759	(B,121,50)	CKSRYB104K16
C 760	(B,120,36)	CKSRYB104K16
C 761	(B,125,25)	CKSRYB104K16
C 762	(B,115,42)	CKSRYB472K50
C 763	(B,117,46)	CKSRYB102K50
C 764	(B,109,45)	CKSRYB104K16
C 765	(B,131,31)	CKSRYB471K50
C 768	(B,135,27)	CKSRYB104K16
C 769	(B,72,109)	CKSRYB153K50
C 791	(B,112,68)	CKSRYB103K50
C 796	(A,41,87)	CKSRYB103K50
C 801	(B,140,40)	CKSRYB103K50
C 802	(B,151,29)	CKSRYB102K50
C 803	(A,139,34)	CCSRCH101J50
C 804	(A,149,34)	CCSRCH101J50
C 806	(B,153,24)	CKSRYB102K50
C 807	(A,154,17)	CKSRYB104K16
C 808	(A,152,21)	CEVW220M16
C 831	(B,77,18)	CKSRYB104K16
C 832	(A,73,8)	CEVW470M10
C 841	(A,54,9)	CEVW470M16
C 842	(B,35,34)	CKSRYB104K16
C 843	(B,34,28)	CKSRYB102K50
C 844	(A,34,26)	CEJQ330M16
C 851	(B,62,12)	CKSRYB473K25
C 852	(A,90,13)	CKSRYB104K16
C 861	(A,59,94)	CKSRYB105K6R3
C 862	(A,59,96)	CKSRYB103K50
C 863	(A,65,95)	CKSRYB104K16
C 871	(A,41,72)	CKSRYB104K16
C 873	(A,38,76)	CEVW101M6R3

Circuit Symbol and No.		Part No.
C 875	(A,36,82)	CKSRYB105K10
C 877	(A,46,96)	CEVW101M6R3
C 878	(A,53,97)	CKSRYB103K50
C 879	(B,46,95)	CKSYB475K10
C 901	(A,24,44) 2 200 µF/16 V	CCH1405
C 903	(B,25,59)	CKSRYB472K50
C 904	(B,25,49)	CKSRYB103K50
C 905	(A,25,51)	CEJQ470M10
C 911	(A,30,106)	CEJQ221M10
C 912	(B,11,114)	CKSRYB103K50
C 913	(A,11,117)	CEJQ101M10
C 921	(A,29,96) 470 µF/16 V	CCH1325
C 922	(B,27,78)	CKSRYB103K50
C 923	(A,27,74)	CEJQ101M10
C 932	(B,71,118)	CKSRYB104K16
C 941	(A,80,111)	CKSQYB105K16
C 963	(A,74,132)	CKSQYB105K10
C 964	(B,71,129)	CKSQYB105K16
C 965	(B,69,129)	CKSQYB105K16
C 966	(B,70,142)	CKSQYB105K16
C 967	(A,71,132)	CKSQYB105K16
C 968	(A,69,132)	CKSQYB105K16
C 969	(A,66,132)	CKSQYB105K16
C 971	(B,60,109)	CKSRYB103K50
C 972	(B,59,113)	CKSRYB103K50
C 973	(A,61,113)	CEJQ100M16
C 981	(B,79,110)	CKSRYB104K16

B

Unit Number :
Unit Name : Keyboard Unit

MISCELLANEOUS

IC 1702	(B,144,29) IC	NJM2870F18
IC 1703	(B,129,13) IC	S-818A33AUC-BGN
IC 1761	(A,95,33) IC	TC7WT125FU
IC 1762	(A,128,36) IC	TC7WH34FU
IC 1763	(B,96,25) IC	PEG182A
IC 1764	(A,120,30) IC	TC7WH32FU
IC 1801	(A,14,34) IC	GP1UX51RK
IC 1831	(A,155,26) IC (DEH-P780MP/XN/UC,DEH-P8850MP/XN/ES)	PD8161A
IC 1831	(A,155,26) IC (DEH-P7800MP/XN/UC)	PD8162A
IC 1832	(A,139,20) IC	PD6544A
IC 1833	(A,96,18) IC	M5M5V216ATP-70HI
IC 1861	(A,122,18) IC	S1D13702F00A100
D 1701	(A,120,36) Diode	DAP202U
D 1702	(A,118,36) Diode	DAN202U
D 1703	(A,113,36) Diode	DAP202U
D 1704	(A,110,36) Diode	DAN202U
D 1732	(A,63,22) LED	SML412BC5T(MN)
D 1733	(A,49,37) LED	SML412BC5T(MN)
D 1734	(A,34,22) LED	SML412BC5T(MN)
D 1735	(A,49,8) LED	SML412BC5T(MN)
D 1736	(A,66,32) LED	SML412BC5T(MN)
D 1737	(A,66,12) LED	SML412BC5T(MN)
D 1738	(A,32,32) LED	SML412BC5T(MN)
D 1739	(A,32,12) LED	SML412BC5T(MN)
D 1740	(A,15,22) LED	SML412BC5T(MN)

Circuit Symbol and No.		Part No.
D 1741	(A,8,9) LED	SML412BC5T(MN)
D 1751	(B,39,15) Diode	HZU7R5(B2)
D 1752	(B,64,16) Diode	DAP202U
D 1753	(B,64,20) Diode	DAN202U
D 1759	(B,35,15) Diode	HZU7R5(B2)
D 1761	(A,102,35) Diode	1SS355
L 1701	(B,119,18) Inductor	CTF1379
L 1702	(B,123,19) Inductor	CTF1379
L 1703	(B,142,22) Inductor	CTF1617
L 1762	(B,143,14) Inductor	CTF1617
L 1861	(B,158,18) Inductor	CTF1617
L 1862	(A,111,13) Inductor	LCTC1R0K2125
L 1863	(A,124,5) Inductor	LCTC1R0K2125
L 1931	(B,121,9) Inductor	CTF1617
L 1932	(B,121,14)Chip Ferrite Bead	CTF1399
L 1933	(B,148,14) Coil	ATH1167
X 1761	(A,108,25)Resonator 8.0 MHz	CSS1675
S 1701	(A,161,5) Push Switch	CSG1155
S 1731	(A,6,26) Push Switch	CSG1155
S 1732	(A,34,37) Push Switch	CSG1155
S 1733	(A,49,22)Switch(MULTI-CONTROL)	CSX1065
S 1734	(A,34,7) Push Switch	CSG1155
S 1735	(A,64,37) Push Switch	CSG1155
S 1736	(A,64,7) Push Switch	CSG1155
S 1737	(A,15,26) Push Switch	CSG1155
S 1738	(A,5,9) Push Switch	CSG1155
S 1739	(A,24,26) Push Switch	CSG1155
	OEL Module	MXK8230

RESISTORS

R 1703	(B,117,17)	RS1/16S103J
R 1704	(A,122,35)	RS1/16S222J
R 1705	(A,124,36)	RS1/16S222J
R 1706	(A,156,5)	RS1/16S333J
R 1707	(A,113,33)	RS1/16S222J
R 1708	(A,109,30)	RS1/16S222J
R 1709	(A,115,36)	RS1/16S103J
R 1733	(B,62,32)	RS1/16S102J
R 1734	(B,33,30)	RS1/16S102J
R 1735	(B,40,10)	RS1/16S222J
R 1737	(B,53,25)	RS1/16S332J
R 1738	(B,40,12)	RS1/16S103J
R 1739	(B,64,32)	RS1/16S103J
R 1740	(B,37,30)	RS1/16S822J
R 1741	(B,37,29)	RS1/16S473J
R 1742	(B,50,38)	RS1/16S181J
R 1743	(B,49,7)	RS1/16S181J
R 1744	(B,60,6)	RS1/16S181J
R 1745	(B,33,7)	RS1/16S181J
R 1746	(B,48,38)	RS1/16S151J
R 1747	(B,48,7)	RS1/16S151J
R 1748	(B,58,6)	RS1/16S101J
R 1749	(B,35,7)	RS1/16S181J
R 1750	(B,11,15)	RS1/16S271J
R 1751	(B,10,15)	RS1/16S331J
R 1752	(B,10,9)	RS1/16S561J
R 1753	(B,8,9)	RS1/16S331J
R 1761	(A,98,34)	RS1/16S473J
R 1762	(A,96,30)	RS1/16S473J
R 1763	(A,97,28)	RS1/16S682J

Circuit Symbol and No.		Part No.
R 1764	(A,101,28)	RS1/16S682J
R 1765	(A,103,31)	RS1/16S154J
R 1766	(A,100,28)	RS1/16S392J
R 1767	(A,98,28)	RS1/16S392J
R 1768	(A,105,32)	RS1/16S473J
R 1769	(B,106,21)	RAB4CQ101J
R 1770	(B,106,30)	RAB4CQ101J
R 1771	(A,100,32)	RS1/16S473J
R 1772	(B,106,27)	RS1/16S101J
R 1773	(B,105,36)	RS1/16S101J
R 1775	(B,78,6)	RAB4CQ101J
R 1776	(B,104,36)	RS1/16S101J
R 1777	(A,85,36)	RAB4CQ473J
R 1778	(A,89,29)	RS1/16S101J
R 1779	(A,90,34)	RS1/16S473J
R 1780	(A,90,32)	RS1/16S101J
R 1781	(B,98,35)	RAB4CQ101J
R 1782	(B,98,15)	RS1/16S473J
R 1783	(B,96,15)	RS1/16S473J
R 1784	(B,94,15)	RS1/16S101J
R 1785	(A,81,33)	RAB4CQ101J
R 1786	(B,80,34)	RAB4CQ101J
R 1787	(B,84,31)	RAB4CQ101J
R 1789	(B,84,15)	RAB4CQ101J
R 1790	(B,79,16)	RS1/16S101J
R 1791	(B,79,15)	RS1/16S101J
R 1793	(B,80,30)	RAB4CQ101J
R 1794	(B,84,27)	RAB4CQ101J
R 1795	(B,80,25)	RAB4CQ101J
R 1796	(B,80,20)	RAB4CQ101J
R 1797	(B,84,18)	RAB4CQ101J
R 1798	(B,78,9)	RAB4CQ101J
R 1799	(A,127,32)	RS1/16S0R0J
R 1804	(B,106,19)	RS1/16S101J
R 1811	(B,18,29)	RS1/16S101J
R 1812	(B,23,33)	RS1/16S103J
R 1813	(B,21,36)	RS1/16S2R2J
R 1831	(A,128,6)	RS1/16S473J
R 1832	(A,131,6)	RS1/16S101J
R 1833	(A,132,10)	RS1/16S473J
R 1834	(A,133,32)	RS1/16S473J
R 1835	(A,153,12)	RS1/16S471J
R 1836	(A,149,12)	RS1/16S471J
R 1864	(A,132,16)	RS1/16S473J
R 1865	(A,131,18)	RS1/16S473J
R 1866	(A,131,25)	RS1/16S101J
R 1869	(A,112,9)	RS1/16S102J
R 1870	(A,131,21)	RS1/16S102J
R 1871	(A,127,28)	RS1/16S102J
R 1872	(A,129,27)	RS1/16S102J
R 1873	(A,131,19)	RS1/16S102J
R 1874	(A,108,9)	RS1/16S102J
R 1931	(B,112,15)	RS1/16S101J
R 1932	(B,111,15)	RS1/16S101J
R 1933	(B,108,15)	RS1/16S101J
R 1934	(B,106,15)	RAB4CQ101J

CAPACITORS

C 1707	(B,128,19)	CKSRYB474K10
C 1708	(B,141,29)	CKSRYB474K10
C 1709	(B,147,31)	CKSRYB223K50
C 1710	(B,135,14)	CSZS4R7M10
C 1711	(B,150,29)	CSZS4R7M10
C 1732	(A,65,22)	CKSRYB104K16
C 1735	(A,33,22)	CKSRYB104K16
C 1741	(A,49,39)	CKSRYB104K16
C 1744	(A,49,6)	CKSRYB104K16
C 1746	(A,15,19)	CKSRYB104K16
C 1747	(A,10,9)	CKSRYB104K16
C 1748	(B,61,25)	CKSRYB103K50
C 1749	(B,33,32)	CKSRYB103K50
C 1750	(A,66,31)	CKSRYB104K16
C 1751	(A,66,14)	CKSRYB104K16
C 1752	(A,32,31)	CKSRYB104K16
C 1753	(A,32,14)	CKSRYB104K16
C 1761	(A,96,36)	CKSRYB104K16
C 1762	(A,99,36)	CKSRYB104K16
C 1763	(A,100,34)	CKSRYB473K25
C 1764	(A,134,37)	CKSRYB104K16
C 1765	(B,102,36)	CKSRYB103K50
C 1766	(B,139,15)	CKSRYB104K16
C 1767	(B,88,17)	CKSRYB104K16
C 1768	(B,133,10)	CKSRYB103K50
C 1769	(B,138,10)	CSZS4R7M10
C 1770	(A,125,33)	CKSRYB104K16
C 1801	(B,20,32)	CSZS100M16
C 1831	(A,147,25)	CKSRYB104K16
C 1832	(A,95,9)	CKSRYB104K16
C 1833	(B,160,39)	CKSRYB104K16
C 1834	(A,154,14)	CCSRCH100D50
C 1835	(B,138,12)	CCSRCH100D50
C 1862	(B,158,15)	CKSRYB103K50
C 1863	(B,160,8)	CSZS4R7M10
C 1864	(A,113,13)	CKSRYB104K16
C 1865	(A,131,14)	CKSRYB473K25
C 1867	(A,116,26)	CKSRYB104K16
C 1868	(A,131,24)	CKSRYB104K16
C 1869	(A,128,10)	CKSRYB104K16
C 1870	(A,131,12)	CKSRYB104K16
C 1871	(A,125,28)	CCSRCH100D50
C 1872	(A,129,28)	CCSRCH100D50
C 1873	(A,131,22)	CCSRCH100D50
C 1874	(A,108,13)	CKSYB106K10
C 1932	(B,117,10)	CKSRYB103K50
C 1933	(B,116,12)	CKSRYB104K16
C 1936	(B,115,14)	CKSRYB104K16
C 1937	(B,92,10)	CKSRYB104K16
C 1939	(B,153,13)	CKSYB106K10
C 1941	(B,130,6)	CKSYB106K10

C

Unit Number : CWX3328

Unit Name : CD Core Unit(COMP1D)

MISCELLANEOUS

IC 201	(B,39,70)	IC	UPD63763CGJ
IC 203	(A,12,16)	IC	NJM2886DL3-33
IC 301	(A,28,18)	IC	BA5835FP

Circuit Symbol and No.			Part No.
IC 701	(A,32,48)	IC	PE5552A
Q 101	(B,60,89)	Transistor	2SA1577
Q 701	(B,24,41)	Transistor	UN2111
X 701	(A,24,37)	Ceramic Resonator 4.000 MHz	CSS1652
S 901	(A,57,57)	Switch(HOME)	CSN1067
S 903	(B,23,78)	Switch(DSCSNS)	CSN1067
S 904	(B,42,87)	Switch(12EJ)	CSN1068
S 905	(B,28,88)	Switch(8EJ)	CSN1068

RESISTORS

R 101	(B,61,92)	RS1/10SR2R4J
R 102	(B,63,92)	RS1/10SR2R4J
R 103	(B,63,89)	RS1/10SR2R7J
R 104	(A,52,73)	RS1/16SS102J
R 201	(B,44,57)	RS1/16SS102J
R 202	(A,38,62)	RS1/16SS473J
R 203	(A,37,62)	RS1/16SS473J
R 210	(A,33,62)	RS1/16SS0R0J
R 214	(A,46,79)	RS1/16SS472J
R 216	(A,46,81)	RS1/16SS472J
R 221	(A,44,81)	RS1/16SS103J
R 222	(A,45,81)	RS1/16SS103J
R 225	(B,52,78)	RS1/16SS103J
R 226	(B,52,77)	RS1/16SS393J
R 227	(A,44,75)	RS1/16SS562J
R 228	(A,46,72)	RS1/16SS122J
R 229	(A,44,72)	RS1/16SS472J
R 232	(A,46,75)	RS1/16SS122J
R 237	(B,22,64)	RS1/16SS221J
R 238	(B,22,65)	RS1/16SS221J
R 239	(B,22,66)	RS1/16SS221J
R 241	(B,26,63)	RS1/16SS333J
R 243	(B,26,62)	RS1/16SS333J
R 245	(B,26,69)	RS1/16SS333J
R 248	(B,55,74)	RS1/16SS105J
R 307	(A,19,20)	RS1/16SS183J
R 308	(A,17,20)	RS1/16SS183J
R 309	(A,18,18)	RS1/16SS183J
R 310	(A,17,16)	RS1/16SS183J
R 701	(B,26,44)	RS1/16SS221J
R 707	(B,32,45)	RS1/16SS473J
R 709	(A,36,35)	RS1/16SS222J
R 710	(B,41,46)	RS1/16SS102J
R 712	(A,45,57)	RS1/16SS222J
R 713	(B,40,57)	RS1/16SS222J
R 716	(B,29,37)	RS1/16SS472J
R 724	(B,31,36)	RS1/16S473J
R 726	(B,23,47)	RS1/16SS103J
R 727	(B,31,42)	RS1/16SS473J
R 729	(B,20,48)	RS1/16SS223J
R 730	(B,20,46)	RS1/16SS473J
R 740	(A,38,59)	RS1/16SS222J
R 746	(A,13,38)	RS1/16SS104J
R 750	(A,40,66)	RS1/16SS473J
R 751	(B,40,46)	RS1/16SS102J
R 902	(A,20,36)	RS1/16SS221J
R 905	(A,21,36)	RS1/16SS221J
R 906	(B,20,36)	RS1/16SS221J
R 909	(B,16,65)	RS1/16SS0R0J

Circuit Symbol and No.		Part No.

CAPACITORS

C 103	(B,57,83)	CEVW101M16
C 108	(A,47,66)	CKSSYB104K10
C 201	(B,46,56)	CKSSYB102K50
C 202	(B,47,58)	CKSSYB104K10
C 205	(A,34,63)	CKSSYB104K10
C 208	(B,34,54)	CKSSYB104K10
C 209	(B,31,57)	CKSSYB104K10
C 210	(A,31,66)	CKSRYB105K10
C 216	(B,53,77)	CKSSYB332K50
C 217	(B,52,79)	CKSSYB104K10
C 218	(B,52,76)	CKSSYB473K10
C 219	(B,52,74)	CKSSYB104K10
C 220	(A,46,77)	CKSSYB182K50
C 221	(B,51,74)	CKSSYB104K10
C 222	(A,46,73)	CCSSCH560J50
C 223	(A,44,74)	CCSSCH4R0C50
C 224	(B,52,68)	CKSSYB104K10
C 225	(A,47,67)	CKSSYB103K16
C 226	(A,49,67)	CCSSCH680J50
C 227	(A,48,65)	CCSSCH470J50
C 228	(A,46,62)	CKSSYB103K16
C 232	(A,12,31)	CKSRYB105K10
C 237	(A,31,67)	CKSSYB104K10
C 239	(A,46,74)	CCSSCH220J50
C 246	(A,42,80)	CKSSYB104K10
C 249	(B,25,57)	CKSSYB221K50
C 250	(A,42,81)	CKSRYB102K50
C 251	(A,41,83)	CKSRYB102K50
C 303	(A,18,20)	CKSSYB472K25
C 304	(A,17,17)	CKSSYB103K16
C 307	(A,34,15)	CKSSYB104K10
C 308	(A,17,30)	CKSRYB105K10
C 701	(B,25,47)	CKSSYB104K10
C 703	(B,28,42)	CKSSYB103K16
C 706	(B,34,43)	CKSSYB104K10
C 707	(A,36,57)	CKSSYB104K10
C 714	(A,24,41)	CKSSYB104K10
C 722	(B,29,45)	CKSQYB475K6R3
C 903	(B,14,54)	CKSSYB471K50

D

Unit Number : CWS1389
Unit Name : Switch Unit

S 1	Switch(CLOSE)	CSN1051
S 2	Switch(OPEN)	CSN1052

Miscellaneous Parts List

	Pickup Unit(P10.5)(Service)	CXX1942
M 1	Motor Unit(SPINDLE)	CXC6742
M 2	Motor Unit(LOADING/CARRIAGE)	CXC4026
M 801	Motor Unit(FLAP)	XXA7400

6. ADJUSTMENT
6.1 CD ADJUSTMENT

1) Cautions on adjustments

• In this product the single voltage (3.3V) is used for the regulator. The reference voltage is the REFO1 (1.65V) instead of the GND.
If you should mistakenly short the REFO1 with the GND during adjustment, accurate voltage will not be obtained, and the servo's misoperation will apply excessive shock to the pickup. To avoid such problems:
a. Do not mix up the REFO1 with the GND when connecting the (-) probe of measuring instruments. Especially on an oscilloscope, avoid connecting the (-) probe for CH1 to the GND.
b. In many cases, measuring instruments have the same potential as that for the (-) probe. Be sure to set the measuring instruments to the floating state.
c. If you have mistakenly connected the REFO1 to the GND, turn off the regulator or the power immediately.

• Before mounting and removing filters or leads for adjustment, be sure to turn off the regulator.

• For stable circuit operation, keep the mechanism operating for about one minute or more after the regulator is turned on.

• In the test mode, any software protections will not work. Avoid applying any mechanical or electrical shock to the mechanism during adjustment.

• The RFI and RFO signals with a wide frequency range are easy to oscillate. When observing the signals, insert a resistor of 1k ohms in series.

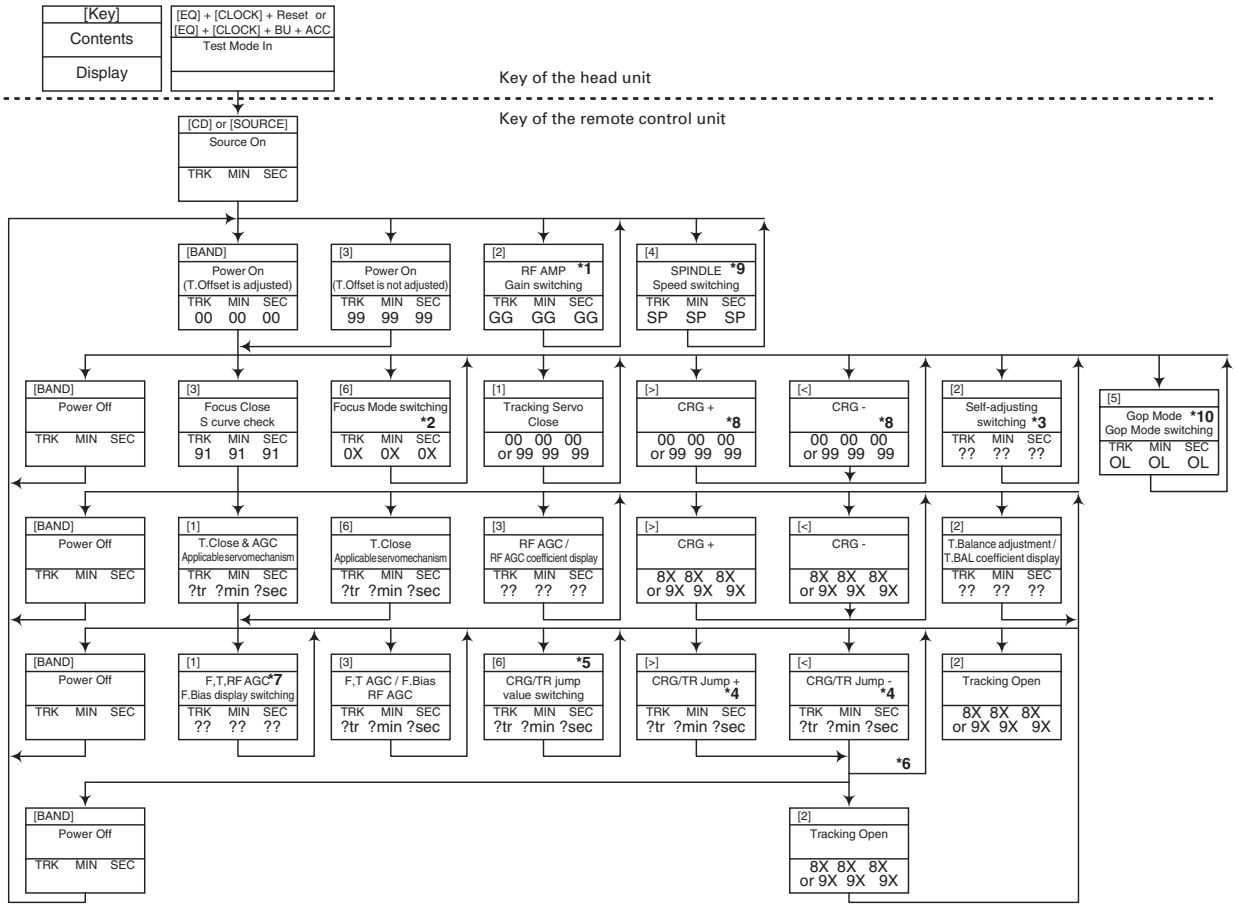
• The load and eject operation is not guarantied with the mechanism upside down. If the mechanism is blocked due to mistaken eject operation, reset the product or turn off and on the ACC to restore it.

2) Test mode

This mode is used to adjust the CD mechanism module.
• To enter the test mode.
While pressing the EQ and CLOCK keys at the same time, reset.
• To exit from the test mode.
Turn off the ACC and back up.

Notes:
a. During ejection, do not press any other keys than the EJECT key until the loaded disc is ejected.
b. If you have pressed the (→) key or (←) key during focus search, turn off the power immediately to protect the actuator from damage caused by the lens stuck.
c. For the TR jump modes except 100TR, the track jump operation will continue even if the key is released.
d. For the CRG move and 100TR jump modes, the tracking loop will be closed at the same time when the key is released.
e. When the power is turned off and on, the jump mode is reset to the single TR (91), the RF amp gain is set to 0dB, and the auto-adjustment values are reset to the default settings.

● Flow Chart



*1) TYP (TRK MIN SEC) → $^{TRK}06^{MIN}06^{SEC}06$ → $^{TRK}12^{MIN}12^{SEC}12$

*2) Focus Close → S Curve check setting → F EQ measurement setting
$^{TRK}00^{MIN}00^{SEC}00$ $^{TRK}01^{MIN}01^{SEC}01$ $^{TRK}02^{MIN}02^{SEC}02$
($^{TRK}99^{MIN}99^{SEC}99$)

*3) F.Offset Display → RF.Offset → T.Offset Display → Switch to the order of the original display

*4) 1TR/4TR/10TR/32TR/100TR

*5) Single → 4TR → 10TR → 32TR → 100TR → CRG Move
9x(8x):91(81) 92(82) 93(83) 94(84) 95(85) 96(86)

*6) Only at the time of CRG move, 100TR jump

*7) TRK/MIN/SEC → F.AGC → T.AGC Gain → F.Bias → RF AGC

*8) CRG motor voltage = 2 [V]

*9) TYP (1X) (TRK MIN SEC) → $^{TRK}22^{MIN}22^{SEC}22$ → $^{TRK}11^{MIN}11^{SEC}11$

*10) OFF(TYP) (TRK MIN SEC) → FORCUS $^{TRK}70^{MIN}70^{SEC}70$ → TRACKING $^{TRK}71^{MIN}71^{SEC}71$

[Key]	Operation Test Mode
[BAND]	Power On/Off
[>]	CRG + / TR Jump + (Direction of the external surface)
[<]	CRG - / TR Jump - (Direction of the internal surface)
[1]	T. CLS & AGC & Applicable servomechanism / AGC,AGC display setting
[2]	RF Gain switching / Offset adjustment display / T.Balance adjustment / T. Open
[3]	F. Close,S Curve / Rough Servo and RF AGC / F,T,RF AGC
[4]	SPDL 1X/2X switching As for the double speed(2x), audio output cannot be supported.
[5]	Error Rate measurement ON : ERR 30Counts Start BER display data[%]
[6]	F. Mode switching / Tracking Close / CRG•TR Jump Switching

• As for the double speed (2x), audio output cannot be supported

*) • After the [Eject] key is pressed keys other than the [Eject] key should not be pressed, until disc ejection is complete.
• When the key [2] or [3] is pressed during the Focus Search, the power supply should be immediately turned off (otherwise the lens sticks to Wall, causing the actuator to be damaged).
• In the case of TR jump other than to 100TR, the function shall continue to be processed even if the TR jump key is released. As for the CRG Move and 100TR Jump, the mechanism shall be set to the Tracking Close mode when the key is released.
• When the power is turned on/off the jump mode is reset to the Single TR (91) while the gain of the RFAMP is reset to 0 dB. At the same time all the self-adjusting values shall return to the default setting.

6.2 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT

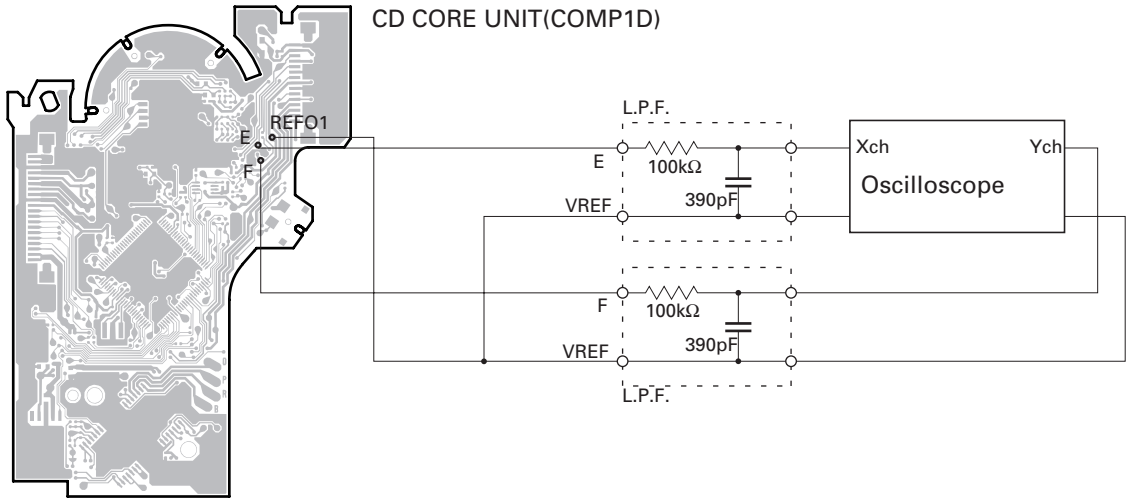
• **Note :**
The grating angle of the PU unit cannot be adjusted after the PU unit is changed. The PU unit in the CD mechanism module is adjusted on the production line to match the CD mechanism module and is thus the best adjusted PU unit for the CD mechanism module. Changing the PU unit is thus best considered as a last resort. However, if the PU unit must be changed, the grating should be checked using the procedure below.

• **Purpose :**
To check that the grating is within an acceptable range when the PU unit is changed.

• **Symptoms of Mal-adjustment :**
If the grating is off by a large amount symptoms such as being unable to close tracking, being unable to perform track search operations, or taking a long time for track searching.

• **Method :**

• Measuring Equipment	• Oscilloscope, Two L.P.F.
• Measuring Points	• E, F, REFO1
• Disc	• TCD-782
• Mode	• TEST MODE



• **Checking Procedure**
1. In test mode, load the disc and switch the 3V regulator on.
2. Using the → and ← buttons, move the PU unit to the innermost track.
3. Press key 3 to close focus, the display should read "91". Press key 2 to implement the tracking balance adjustment the display should now read "81". Press key 3. The display will change, returning to "81" on the fourth press.
4. As shown in the diagram above, monitor the LPF outputs using the oscilloscope and check that the phase difference is within 75° . Refer to the photographs supplied to determine the phase angle.
5. If the phase difference is determined to be greater than 75° try changing the PU unit to see if there is any improvement. If, after trying this a number of times, the grating angle does not become less than 75° then the mechanism should be judged to be at fault.

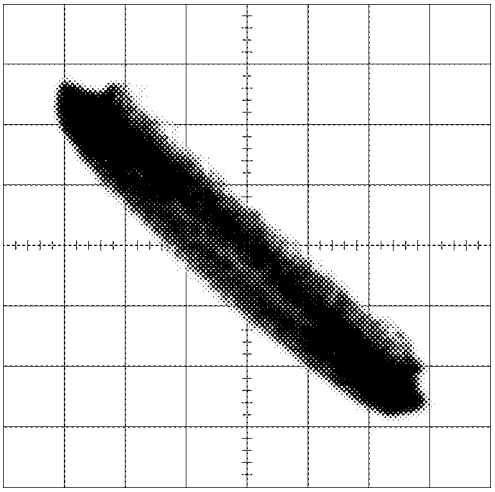
• **Note**
Because of eccentricity in the disc and a slight misalignment of the clamping center the grating waveform may be seen to "wobble" (the phase difference changes as the disc rotates). The angle specified above indicates the average angle.

• **Hint**
Reloading the disc changes the clamp position and may decrease the "wobble".

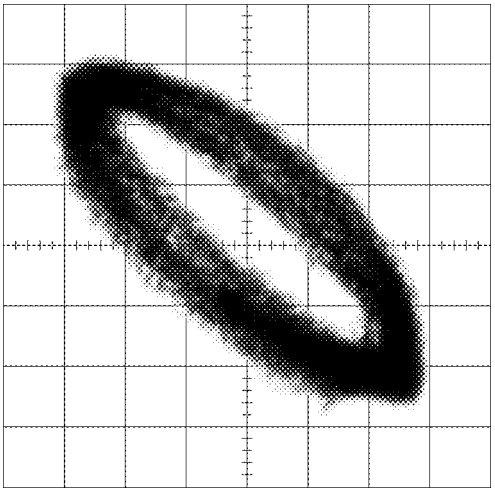
Grating waveform

Ech → Xch 20mV/div, AC
Fch → Ych 20mV/div, AC

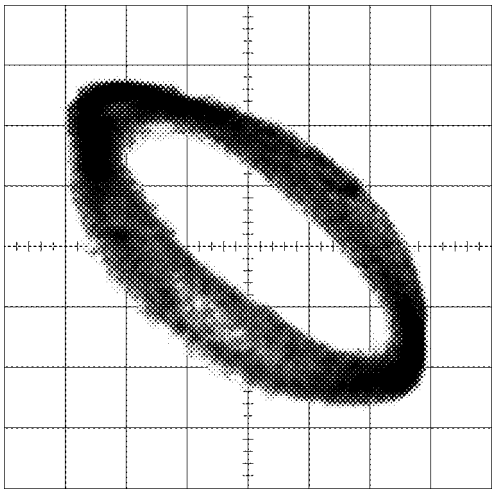
0°



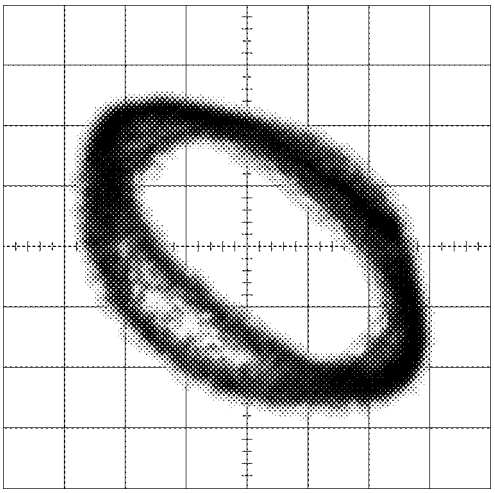
30°



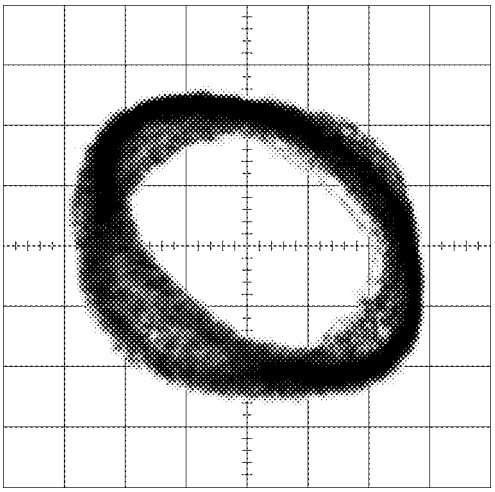
45°



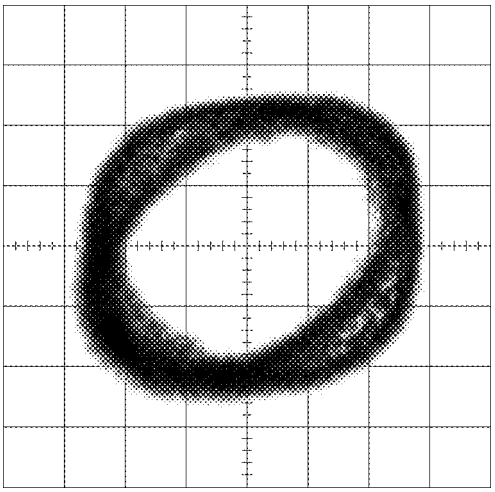
60°



75°



90°



6.3 ERROR MODE

● Error Messages

If a CD is not operative or stopped during operation due to an error, the error mode is turned on and cause(s) of the error is indicated with a corresponding number. This arrangement is intended at reducing nonsense calls from the users and also for facilitating trouble analysis and repair work in servicing.

(1) Basic Indication Method

1) When SERRORM is selected for the CSMOD (CD mode area for the system), error codes are written to DMIN (minutes display area) and DSEC (seconds display area). The same data is written to DMIN and DSEC. DTNO remains in blank as before.

2) Head unit display examples

Depending on display capability of LCD used, display will vary as shown below. xx contains the error number.

8-digit display	6-digit display	4-digit display
ERROR–xx	ERR–xx	E–xx

(2) Error Code List

Code	Class	Displayed error code	Description of the code and potential cause(s)
10	Electricity	Carriage Home NG SERVO LSI Communication Error	CRG can't be moved to inner diameter. CRG can't be moved from inner diameter. → Failure on home switch or CRG move mechanism. Communication error between microcomputer and SERVO LSI.
11	Electricity	Focus Servo NG	Focusing not available. → Stains on rear side of disc or excessive vibrations on REWRITABLE.
12	Electricity	Spindle Lock NG Subcode NG	Spindle not locked. Sub-code is strange (not readable). → Failure on spindle, stains or damages on disc, or excessive vibrations. A disc not containing CD-R data is found. Turned over disc are found, though rarely. CD signal error.
17	Electricity	Setup NG	AGC protection doesn't work. Focus can be easily lost. → Damages or stains on disc, or excessive vibrations on REWRITABLE.
30	Electricity	Search Time Out	Failed to reach target address. → CRG tracking error or damages on disc.
44	Electricity	ALL Skip	Skip setting for all track. (CD-R/RW)
50	Mechanism	CD On Mech Error	Mechanical error during CD ON. → Defective loading motor, mechanical lock and mechanical sensor.
A0	System	Power Supply NG	Power (VD) is ground faulted. → Failure on SW transistor or power supply (failure on connector).

Remarks: Mechanical errors are not displayed (because a CD is turned off in these errors).

Unreadable TOC does not constitute an error. An intended operation continues in this case.

Upper digits of an error code are subdivided as shown below:

1x: Setup relevant errors, 3x: Search relevant errors, Ax: Other errors.

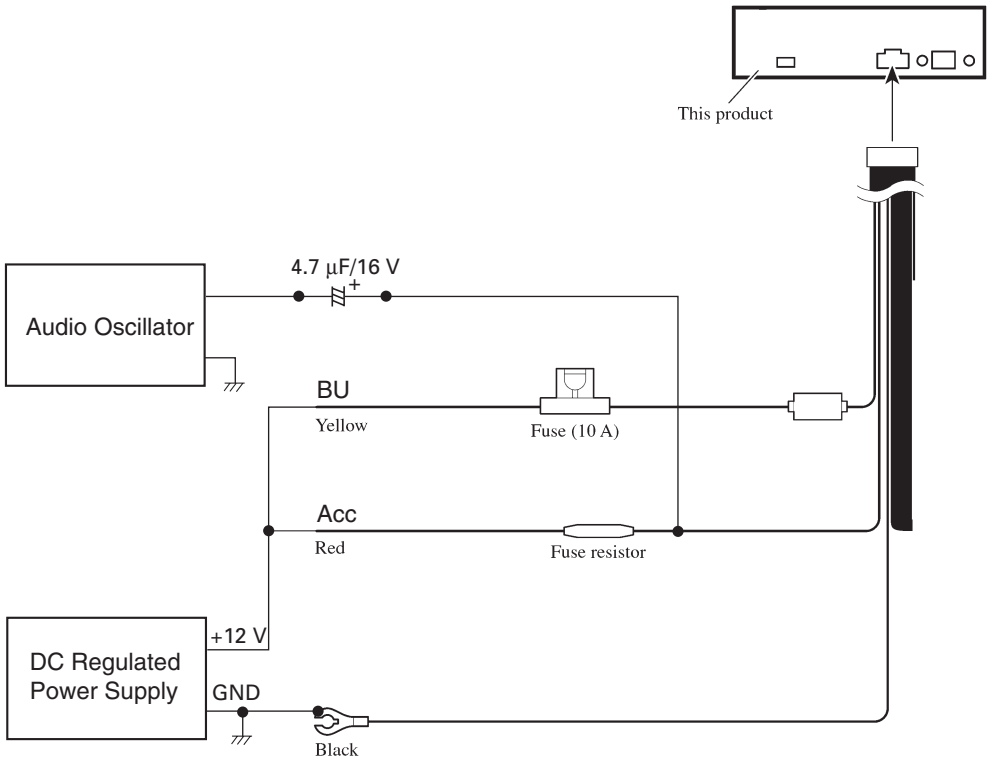
6.4 SYSTEM MICROCOMPUTER TEST PROGRAM

● PCL Output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN IC601(Pin 126) terminal to H.
The clock signal is output from the PCL terminal IC601(Pin 62).
The frequency of the clock signal is 625.000 kHz that is one 32th of the fundamental frequency.
The clock signal should be 625.000 kHz(- 25 Hz, + 25 Hz).
If the clock signal is out of the range, the X'tal (X601) should be replaced with new one.

6.5 HOW TO CHECK THE REVOLUTION NUMBER DETECTION CIRCUIT

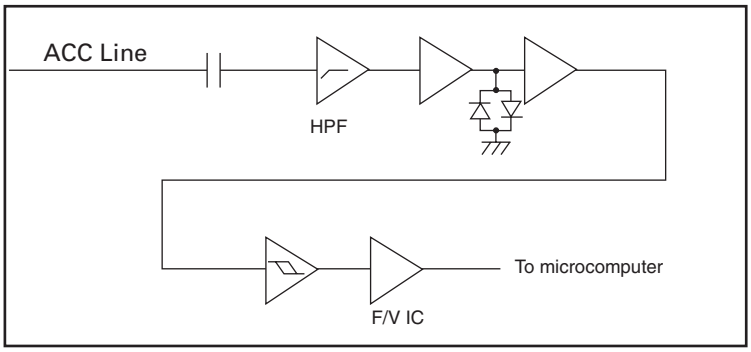
● Connection Diagram



● Checking the Revolution Number Detection Circuit

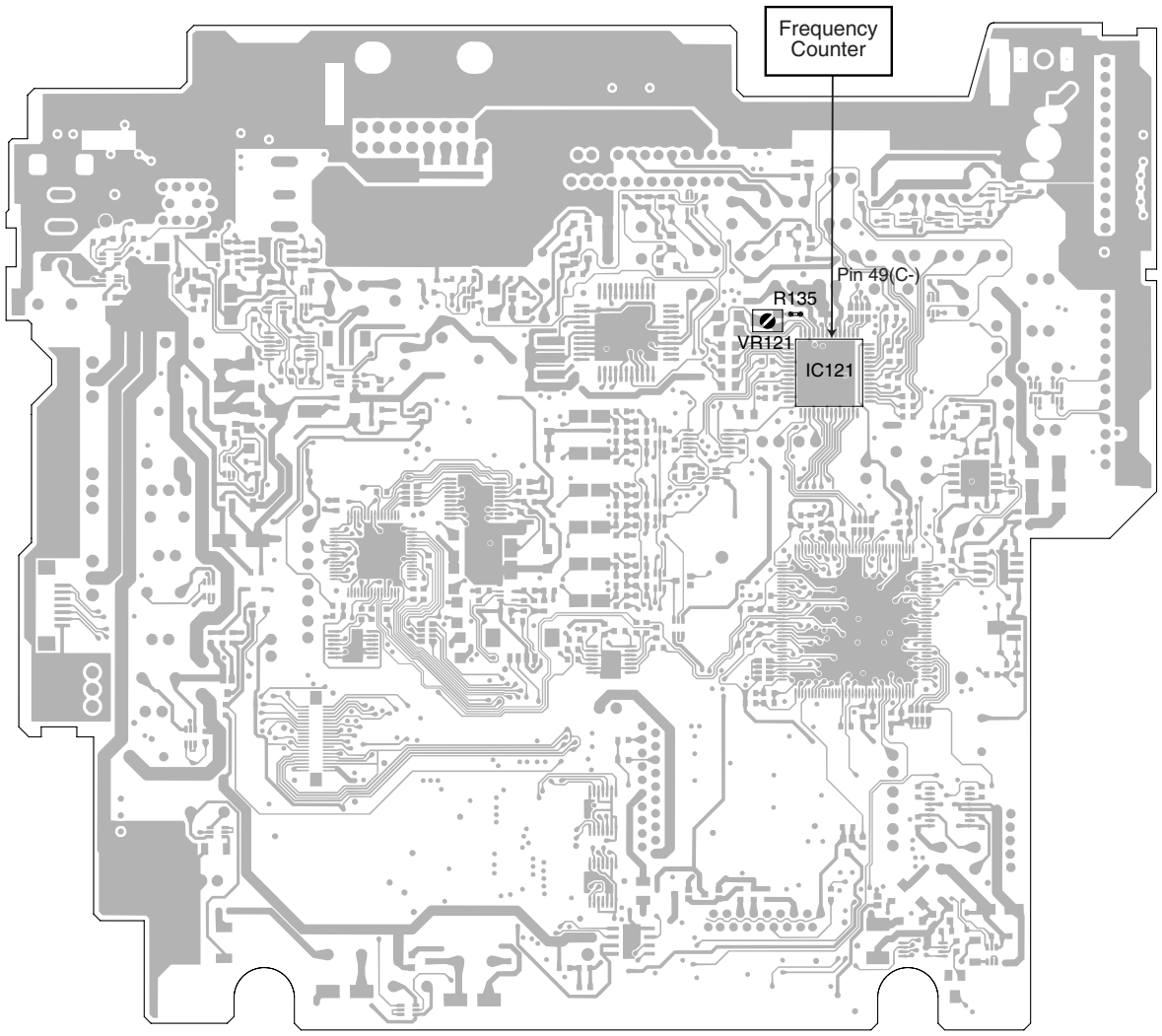
1. Input 400 mVp-p sine waves and confirm change of output voltage according to frequency.
2. There is a definite relation between alternating current frequency and the engine revolution number.
   Frequency at 4 000 rpm can be set by user operation.
   Linear complement between 0 rpm = 0 Hz and 4 000 rpm.

● Block Diagram



6.6 CLOCK ADJUSTMENT

● **Connection Diagram**



Clock adjustment when you change the VR121, R135 or IC121.

● **Clock Adjustment**

Adjustment Point	Switch Position	Adjustment Method
VR121	Source : except for AM	Frequency Counter : 400 kHz ± 10 kHz

7. GENERAL INFORMATION
7.1 DIAGNOSIS
7.1.1 DISASSEMBLY

● **Removing the Case (not shown)**

1. Remove the Case.

● **Removing the CD Mechanism Module (Fig.1)**

1 Remove the four screws.

Disconnect the connector and then remove the CD Mechanism Module.

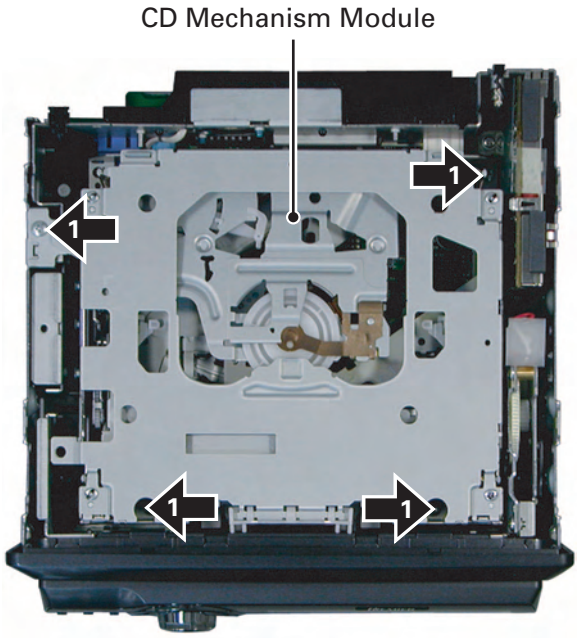


Fig.1

● **Removing the Grille Assy (Fig.2)**

1 Remove the four screws.

Disconnect the connector and then remove the Grille Assy.

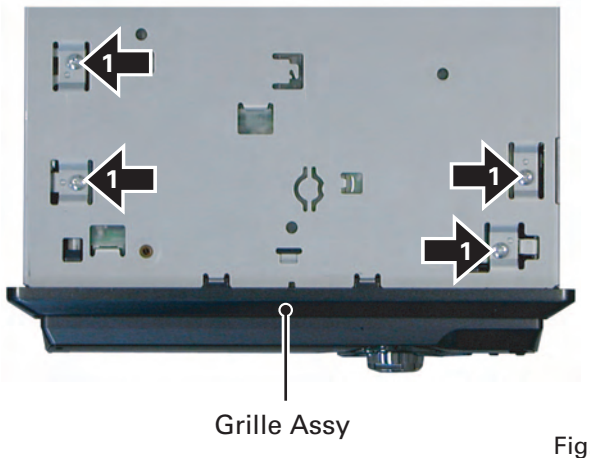


Fig.2

● Removing the Tuner Amp Unit (Fig.3)

1 Remove the three screws.

2 Straighten the tabs at three locations indicated.

3 Remove the screw and then remove the Tuner Amp Unit.

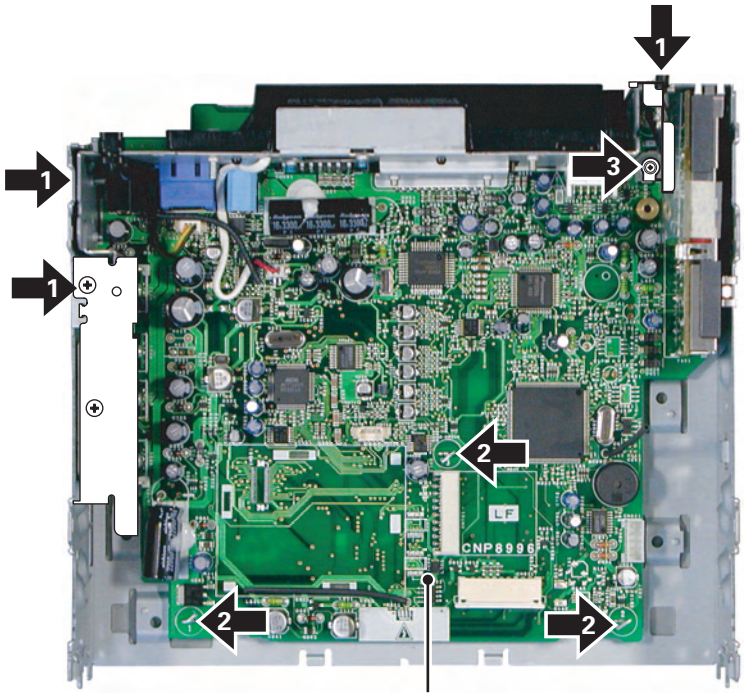
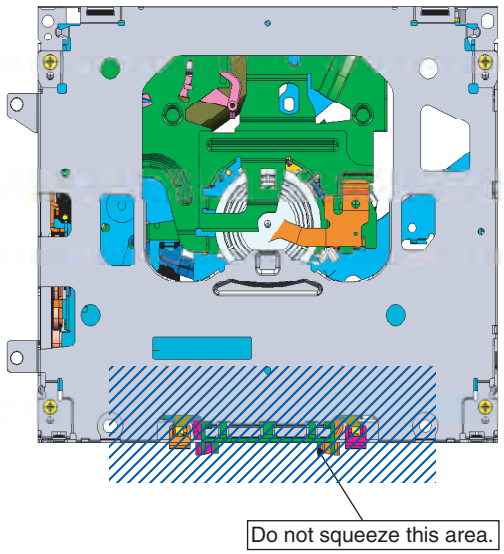


Fig.3

● How to hold the Mechanism Unit

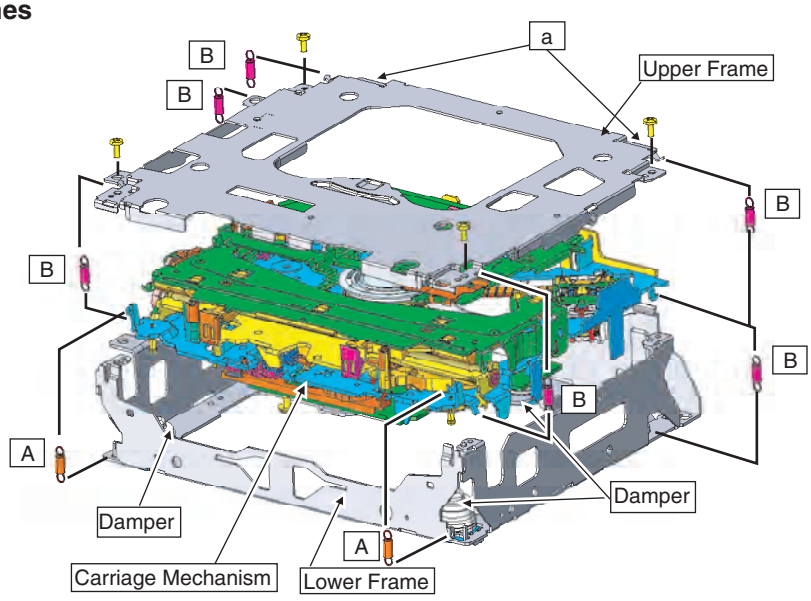
1. Hold the Upper and Lower Frames.
2. Do not hold the front portion of the Upper Frame, because it is not very solid.



● Removing the Upper and Lower Frames

1. With a disc inserted and clamped in the mechanism, remove the two Springs (A), the six Springs (B), and the four Screws.
2. Turn the Upper Frame using the part "a" as a pivot, and remove the Upper Frame.
3. While lifting the Carriage Mechanism, remove it from the three Dampers.

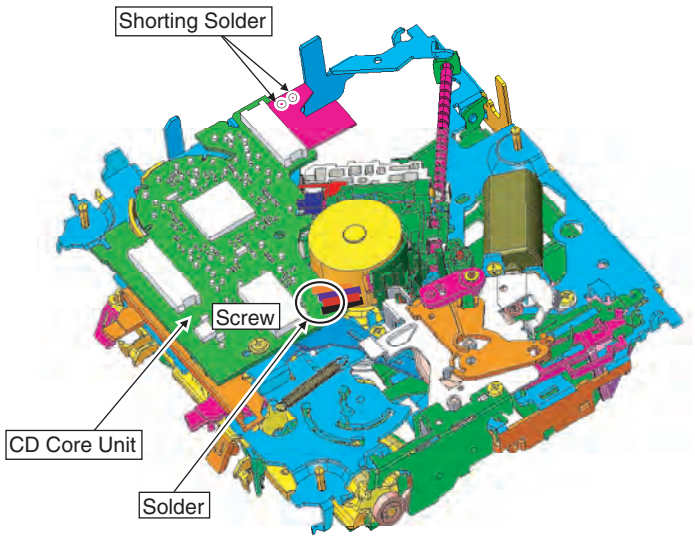
Caution: When assembling, be sure to apply some alcohol to the Dampers and assemble the mechanism in a clamped state.



● How to remove the CD Core Unit

1. Apply Shorting Solder to the flexible cable of the Pickup, and disconnect it from the connector.
2. Unsolder the four leads, and loosen the Screw.
3. Remove the CD Core Unit.

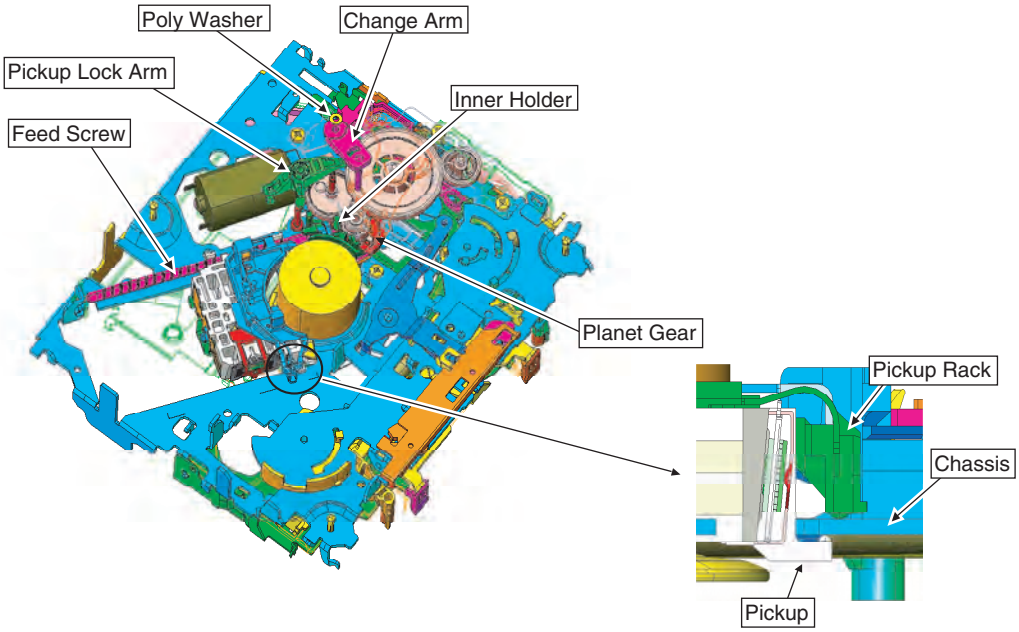
Caution: When assembling the CD Core Unit, assemble it with the SW in a clamped state so as not to damage it.



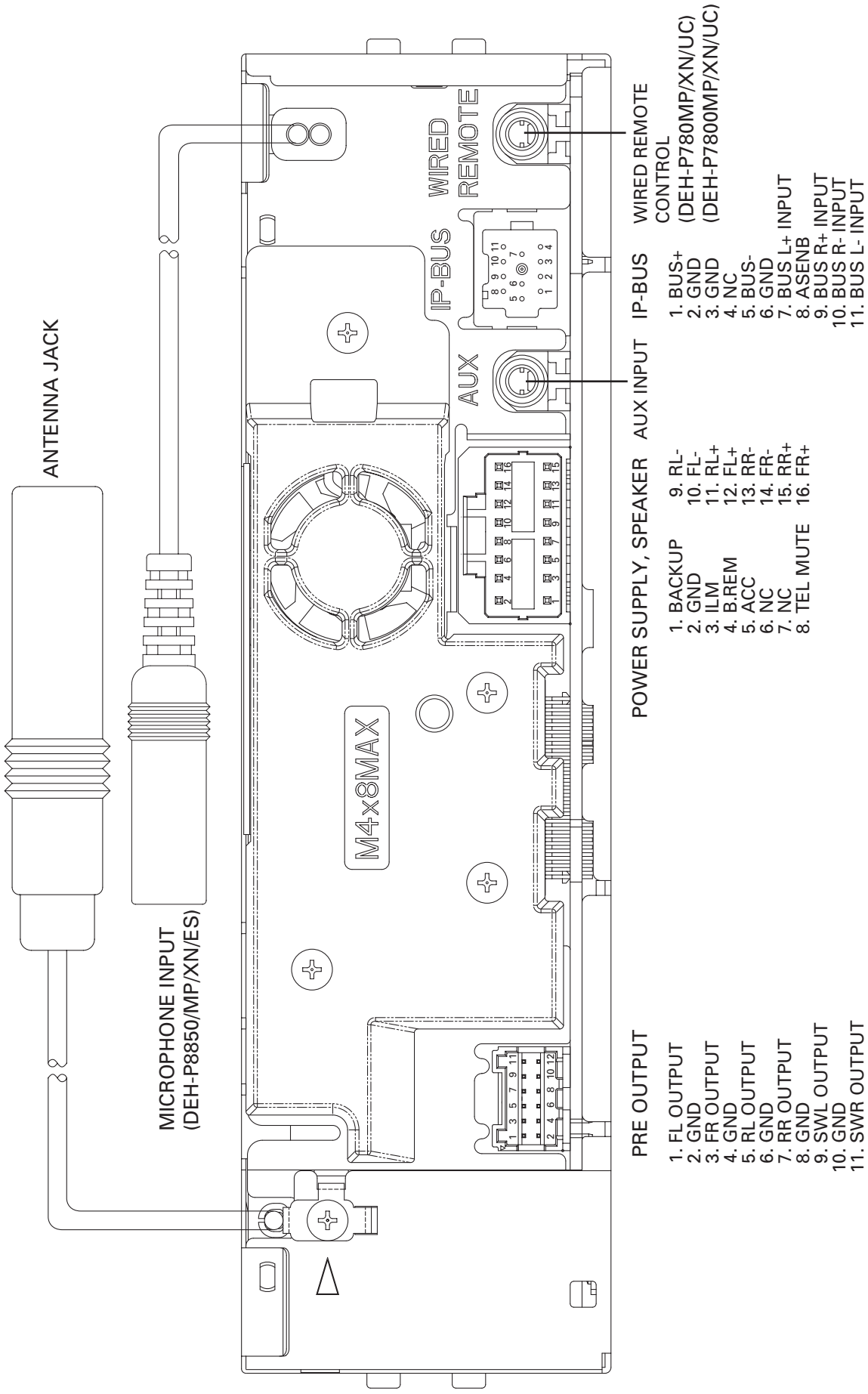
● How to remove the Pickup Unit

1. Make the system in the carriage mechanism mode, and have it clamped.
2. Remove the CD Core Unit and remove the leads from the Inner Holder.
3. Remove the Poly Washer, Change Arm, and Pickup Lock Arm.
4. While releasing from the hook of the Inner Holder, lift the end of the Feed Screw.

Caution: When assembling, move the Planet Gear to the load/eject position before setting the Feed Screw in the Inner Holder.
Assemble the sub unit side of the Pickup, taking the plate (Chassis) in-between. When treating the leads of the Load Carriage Motor Assy, do not make them loose over the Feed Screw.



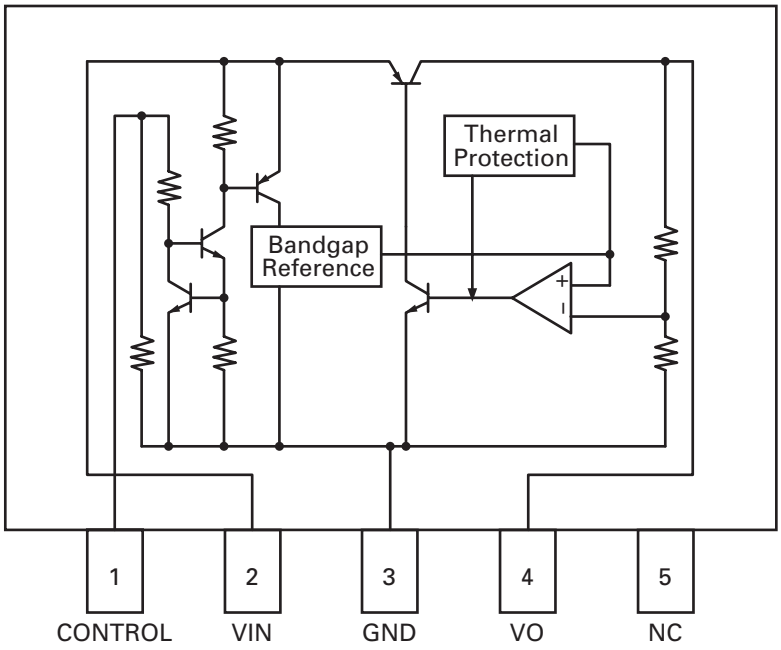
7.1.2 CONNECTOR FUNCTION DESCRIPTION



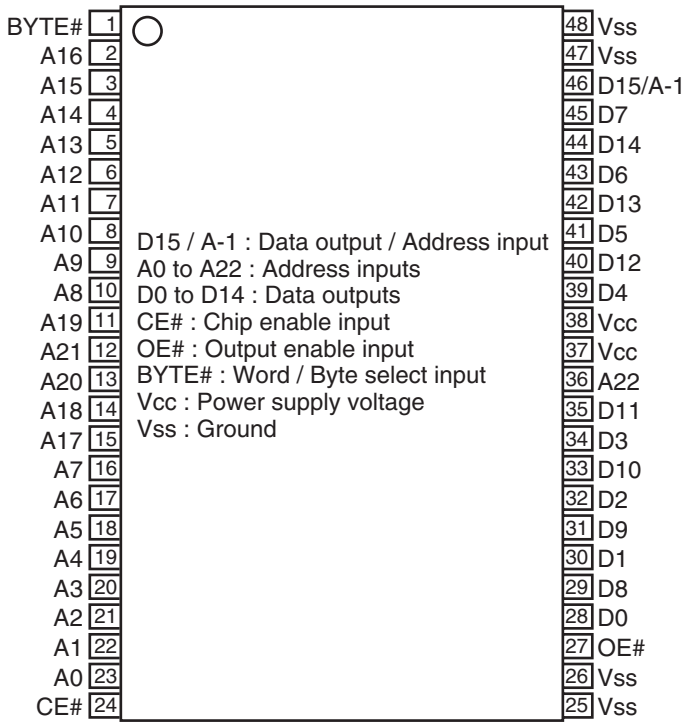
7.2 IC

NJM2886DL3-33	PEG182A	HA12241FP	TC74VHC08FTS1	PEG175A
PD8161A	TC7WH32FU	AK7732VT	PAL007B	TC7SH08FUS1
PD8162A	PD6544A	PM9009A	NJM4151M	
UPD63763CGJ	GP1UX51RK	PCM1606EG	PM8003A	
PE5552A	S1D13702F00A100	TC74VHCT08AFTS1	PEG221A	

NJM2886DL3-33



PD8161A(DEH-P780MP/XN/UC, DEH-P8850MP/XN/ES)
PD8162A(DEH-P7800MP/XN/UC)

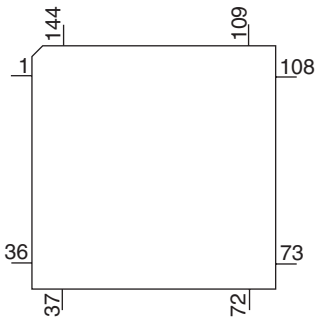


● Pin Functions (UPD63763CGJ)

Pin No.	Pin Name	I/O	Function and Operation
1	D.VDD		Power supply for digital circuits
2	D1.GND		Ground for 1.6 V digital circuits
3	$\overline{\text{RESET}}$	I	Input of reset
4-8	AB12-8	I	Address bus 12-8 from the microcomputer
9-16	AD7-0	I/O	Address/data bus 7-0 to the microcomputer
17	$\overline{\text{CS}}$	I	Chip selection
18	ASTB	I	Address strobe
19	$\overline{\text{READ}}$	I	Control signals(read)
20	$\overline{\text{WRITE}}$	I	Control signals(write)
21	$\overline{\text{WAIT}}$	O	Control signals(wait)
22	INTQ	O	Interruption signals to the external microcomputer
23,24	IFMODE0,1	I	Switching the microcomputer I/F 0, 1
25	D1.VDD		Power supply for 1.6 V digital circuits
26	DA.VDD		Power supply for DAC
27	ROUT	O	Output of audio for the right channel
28	DA.GND		Ground for DAC
29	REGC		Connected to the capacitor for band gap
30	DA.GND		Ground for DAC
31	LOUT	O	Output of audio for the left channel
32	DA.VDD		Power supply for DAC
33	X.VDD		Power supply for the crystal oscillator
34	XTAL	I	Connected to the crystal oscillator(16.9344 MHz)
35	$\overline{\text{XTAL}}$	O	Connected to the crystal oscillator(16.9344 MHz)
36	X.GND		Ground for the crystal oscillator
37	VDDREG15		Control of 1.6 V regulator
38	PWMSW0	I	Setup 0 for PWM output(SD, MD)
39-41	TEST3-1	I	Connected to Ground
42	PWMSW1	I	Setup 1 for PWM output(FD, TD)
43	TESTEN	I	Connected to Ground
44	D1.GND		Ground for 1.6 V digital circuits
45	DIN	I	Input of audio data
46	DOUT	O	Output of audio data
47	SCKIN	I	Clock input for audio data
48	SCKO	O	Clock output for audio data
49	LRCKIN	I	Input of LRCK for audio data
50	LRCK	O	Output LRCK for audio data
51	$\overline{\text{XTALEN}}$	I	Permission to oscillate 16.9344 MHz
52	D1.VDD		Power supply for 1.6 V digital circuits
53	RFCK/HOLD	O	Output of RFCK/HOLD signal
54	WFCK/MIRR	O	Output of WFCK/MIRR signal
55	PLCK/RFOK	O	Output of PLCK/Output of RFOK
56	LOCK/RFOK	O	Output of LRCK/Output of RFOK
57	C1D1/C8M/(RA13)	O	Information on error correction/C8M : 8 MHz
58	C1D2/C16M/(RA12)	O	Information on error correction/C16M : 16 MHz
59	C2D1/RMUTE	O	Information on error correction/Mute for Rch
60	C2D2/LMUTE	O	Information on error correction/Mute for Lch
61	C2D3/SHOCK	O	Information on error correction/Detection of vibration
62	D1.GND		Ground for 1.6 V digital circuits
63	C33M	O	Output of 33.8688 MHz(CLK for SDRAM)
64	($\overline{\text{RCS}}$)	O	DRAM $\overline{\text{CS}}$
65	RA11	O	Output of DRAM address 11
66	(CKE)	O	Output of DRAM CKE
67	$\overline{\text{RAS}}$	O	Output of DRAM $\overline{\text{RAS}}$
68	$\overline{\text{CAS0}}$(LDQM)	O	Output of DRAM lower $\overline{\text{CAS}}$(LDQM)
69	$\overline{\text{CAS1}}$(UDQM)	O	Output of DRAM upper $\overline{\text{CAS}}$(UDQM)

Pin No.	Pin Name	I/O	Function and Operation
70	$\overline{WE}$	O	Output of DRAM $\overline{WE}$
71	$\overline{OE}$($\overline{CAS}$)	O	Output of DRAM $\overline{OE}$($\overline{CAS}$)
72	D.GND		Ground for digital circuits
73-88	RDB0-15	I/O	Input/output of DRAM data0-15
89-99	RA0-10	O	Output of DRAM address0-10
100	D.VDD		Power supply for digital circuits
101	FD+	O	Output of focus drive PWM +
102	FD-	O	Output of focus drive PWM -
103	TD+	O	Output of tracking drive PWM +
104	TD-	O	Output of tracking drive PWM -
105	SD+	O	Output of thread drive PWM +
106	SD-	O	Output of thread drive PWM -
107	MD+	O	Output of spindle drive PWM +
108	MD-	O	Output of spindle drive PWM -
109	REFOUTSV	O	REFOUT for servo
110	AD.VDD		Power supply for ADC
111	EFM	O	Output of EFM signals
112	ASY	I	Input of asymmetry
113	ATEST	O	Analog tests
114	RFI	I	Input of RF
115	AD.GND		Ground for the analog system
116	AGCO	O	Output of RF
117	C3T	O	Connection to the capacitor for detecting 3T
118	AGCI	I	Input of AGC
119	RFO	O	Output of RF(AGC)
120,121	EQ2,1	I	Equalizer 2, 1
122	RF2-	I	Reversal input of RF2
123	RF-	I	Reversal input of RF
124	A.GND		Ground for the analog system
125	A	I	Input of A
126	C	I	Input of C
127	B	I	Input of B
128	D	I	Input of D
129	F	I	Input of F
130	E	I	Input of E
131	VREFIN	I	Input of reference voltage
132	A.VDD		Power supply for the analog system
133	REFOUT	O	Output of reference voltage
134	REFC	I	Connected to the capacitor for output of REFOUT
135	FE-	I	Reversal input of FE
136	FEO	O	Output of FE
137	ADIN	I	Input of FE, TE A/D converter
138	TE-	I	Reversal input of TE
139	TEO	O	Output of TE
140	TE2	O	TE2
141	TEC	I	TEC
142	LD	O	Output of LD
143	PD	I	Input of PD
144	D.GND		Ground for digital circuits

UPD63763CGJ

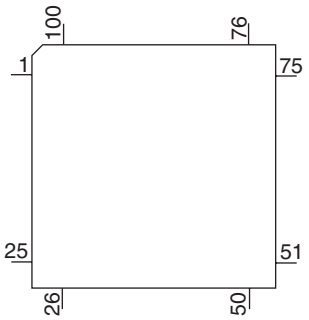


● Pin Functions (PE5552A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	AVREF			A power supply / Positive power supply(5V)
2	AVSS			A power supply GND
3	$\overline{\text{TESTIN}}$	I		Chip check test program starting input
4	CLAMP			Not used
5	EVDD			E power supply / Positive power supply
6	FMODE			For flash rewriting / L : flash rewriting mode
7	FLRQ			For flash rewriting / Reset voltage control
8	IC/FLMD0			IC : VSS direct connection/FLMOD0 : Pull-down
9	VDD			Positive power supply(5V)
10	REGC			Connected to the capacity stabilizing output of the regulator
11	VSS			GND
12	X1	I		Oscillator connection for mainclock
13	X2			Oscillator connection for mainclock
14	$\overline{\text{RESET}}$	I		System reset input
15	XT1	I		Connected to the oscillator for subclock(connected to VSS via the resistor)
16	XT2			Connected to the oscillator for subclock(Open)
17	PULLDOWN	I		Connected to EVDD or EVSS via the resistor
18	$\overline{\text{EJSW}}$			Not used
19	$\overline{\text{XINT}}$	I	C	CD LSI interruption signal input
20	NC			Not used
21	$\overline{\text{BRST}}$	I		Bus reset input
22	BSI	I		Bus serial data input
23	BSO	O	C	Bus serial data output
24	$\overline{\text{BSCK}}$	I/O	/C	Bus serial clock input/output
25	FTxD	O	C	For flash rewriting(transmitted signal)
26	FRxD	I		For flash rewriting(received signal)
27	BRXEN	I/O	/C	Bus RX enable input/output
28	$\overline{\text{BSRQ}}$	I/O	/C	Bus serial clock input/output
29	$\overline{\text{DSPOK}}$			Not used
30	DSCSNS	I	C	Disc state sense input
31	8EJ(S905)	I	C	input of detection of 8 cm disc ejection
32	12EJ(S904)	I	C	input of detection of 12 cm disc ejection
33	EVSS			E power supply GND
34	EVDD			E power supply / Positive power supply
35,36	SRAMLEVEL0,1	O		SRAM level meter output
37	EMPH	O	C	Emphasis information output
38	$\overline{\text{EMPH}}$			Not used
39	CDMUTE			Not used
40	LOEJ			Not used
41	CLCONT	O		Driver input switching output
42	HOME	I		Home SW sense input
43	$\overline{\text{ADENA}}$	O	C	A/D reference voltage supply control output
44	LRCKOK	O	C	(DOUT mute output)
45	SRAMLEVEL2	O	C	SRAM level meter output
46	CD3VON(MCKRQ)	O	C	CD + 3.3 V power supply control output(Digital output : MCKRQ)
47	CONT	O	C	Servo driver power supply control output
48	$\overline{\text{XRST}}$	O	C	CD LSI reset control output
49	VDCONT	O	C	VD power supply control output
50	$\overline{\text{XSI}}$	I		CD LSI serial data input
51	$\overline{\text{XSO}}$	O	C	CD LSI serial data output
52	$\overline{\text{XCK}}$	O	C	CD LSI serial clock output
53	$\overline{\text{XWAIT}}$	I	C	CD LSI wait control signal input
54	XASTB	O	C	CD LSI address strobe output
55	AD0	O	C	Address/data Bus 0
56	INT			Not used

Pin No.	Pin Name	I/O	Format	Function and Operation
57	ROMDATA	I/O		E2PROM data input/output
58	ROMCK	O		E2PROM clock output
59	ROMCS	O	C	E2PROM chip selection output
60,61	NC			Not used
62	CLKOUT			Not used
63	LOCK	I		Spindle lock input
64-68	NC			Not used
69	BVSS			B power supply GND
70	BVDD			B power supply / Positive power supply
71-75	NC			Not used
76	FLMD1	I/O	/C	Address/Data Bus 5
77-90	NC			Not used
91-93	A/D			Not used
94	$\overline{\text{CSENS}}$			Not used
95	TYPE_A/D			Not used
96,97	NC			Not used
98	TEMP			Not used
99	VDSENS	I		VD power supply short sense input
100	DSCSNS			Not used

PE5552A

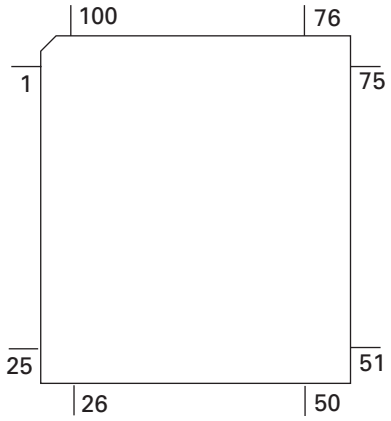


Format	meaning
C	C MOS

● Pin Functions (PEG182A)

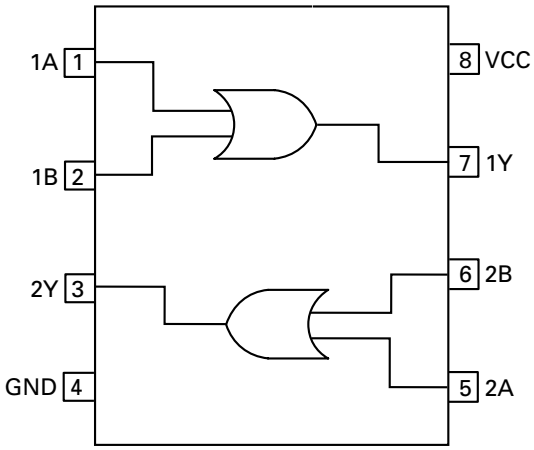
Pin No.	Pin Name	I/O	Format	Function and Operation
1	DRIVE_CS	O	C	Anode driver IC chip select output
2	ROMDT	I/O	/C	ROM correction : Data input/output
3	ROMCS	O	C	ROM correction : Chip select output
4	ROMCK	O	C	ROM correction : Clock output
5	REM	I		Remote control reception input
6	BYTE	I		GND connection
7	CNVSS	I		GND connection
8	NC			Not used OPEN
9	BTLED	O	C	Bluetooth attestation LED output
10	$\overline{\text{RESET}}$	I		Reset input
11	XOUT	O		Crystal oscillating element connection pin
12	VSS1			GND connection
13	XIN	I		Crystal oscillating element connection pin
14	VCC1			VDD connection
15	$\overline{\text{NMI}}$	I		Pull up
16	OELINT	I		OEL controller : VSYNC interrupt notification input
17	OELRESET	O	C	OEL controller : Reset output
18	FLRESET	O	C	Flash memory : Reset output
19	FLBUSY	I		Flash memory : READY and BUSY signal detect input
20	FLCE-ON	O	C	Flash memory : Chip enable output
21	P2CE-ON	O	C	P2ROM : Chip enable output
22	ROMBK2	O	C	Image ROM : Bank address output
23	ROMBK1	O	C	Image ROM : Bank address output
24	ROMBK0	O	C	Image ROM : Bank address output
25	NC			Not used
26-28	$\overline{\text{KS2}}$-$\overline{\text{KS0}}$	O		Key strobe output
29	KYD$\overline{\text{T}}$	O	N	Key data communication output
30	DPDT	I		Display data communicatio
31,32	NC			Not used
33	CDTX	O	C	CD mechanism : Data output
34	CDRX	I		CD mechanism : Data input
35,36	NC	O		Not used
37	$\overline{\text{RDY}}$	I		RDY signal input
38	NC			Not used OPEN
39	$\overline{\text{HOLD}}$	I		Pull up
40	NC			OPEN
41	BCLK			OEL controller : clock output
42	$\overline{\text{RD}}$	O	C	Image ROM : Read stobe output
43	NC			OPEN
44	$\overline{\text{WR}}$	O	C	Write strobe output
45-47	$\overline{\text{CS0}}$-$\overline{\text{CS2}}$	O	C	External ROM chip select output
48-59	A20-A9	O	C	Address bus 20-19 output
60	VCC2			VDD connection
61	A8	O	C	Address bus 8 output
62	VSS2			GND connection
63-70	A7-A0	O	C	Address bus 7-0 output
71-86	D15-D0	I/O	C	Data bus 15-0 input / output
87,88	NC			Not used
89	JOYST	I		Rotary commander data input
90	NC			Not used
91-93	$\overline{\text{KD2}}$-$\overline{\text{KD0}}$	I		Key data input
94	AVSS			GND connection
95	NC			Not used
96	VREF			GND connection
97	AVCC			VCC connection
98,99	NC			Not used
100	OELROMCS	O	C	E2 ROM : Chip select output

PEG182A

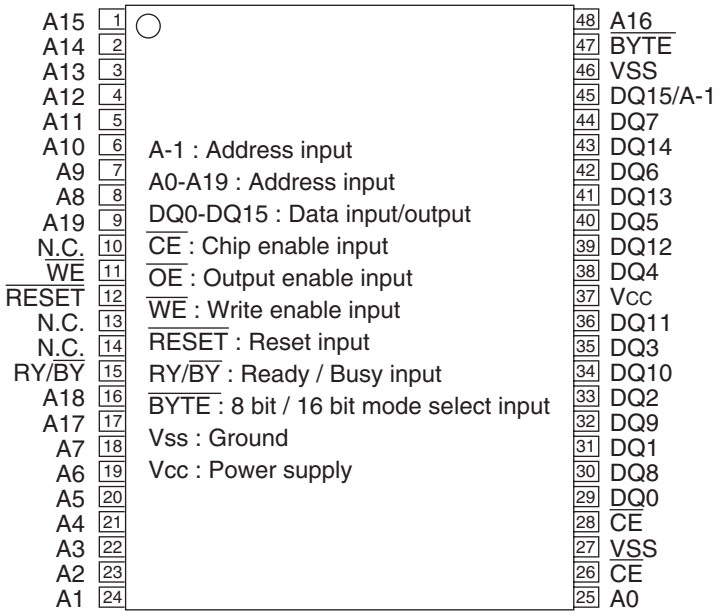


Format	Meaning
C	CMOS
N	Nch open drain

TC7WH32FU

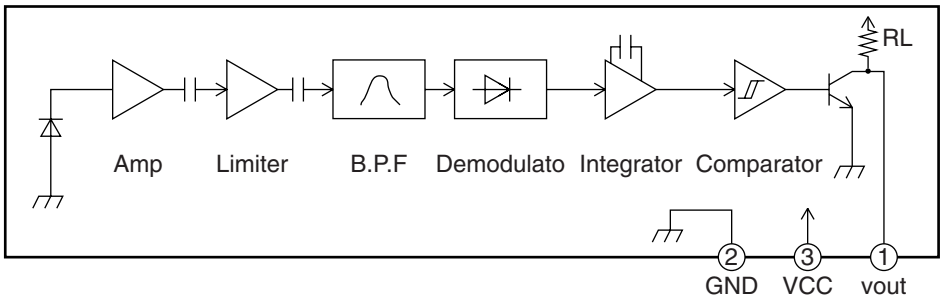


PD6544A

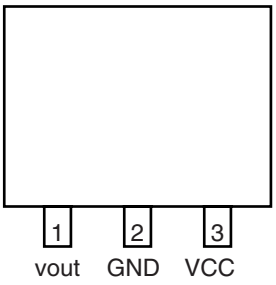


GP1UX51RK

● **Block Diagram**

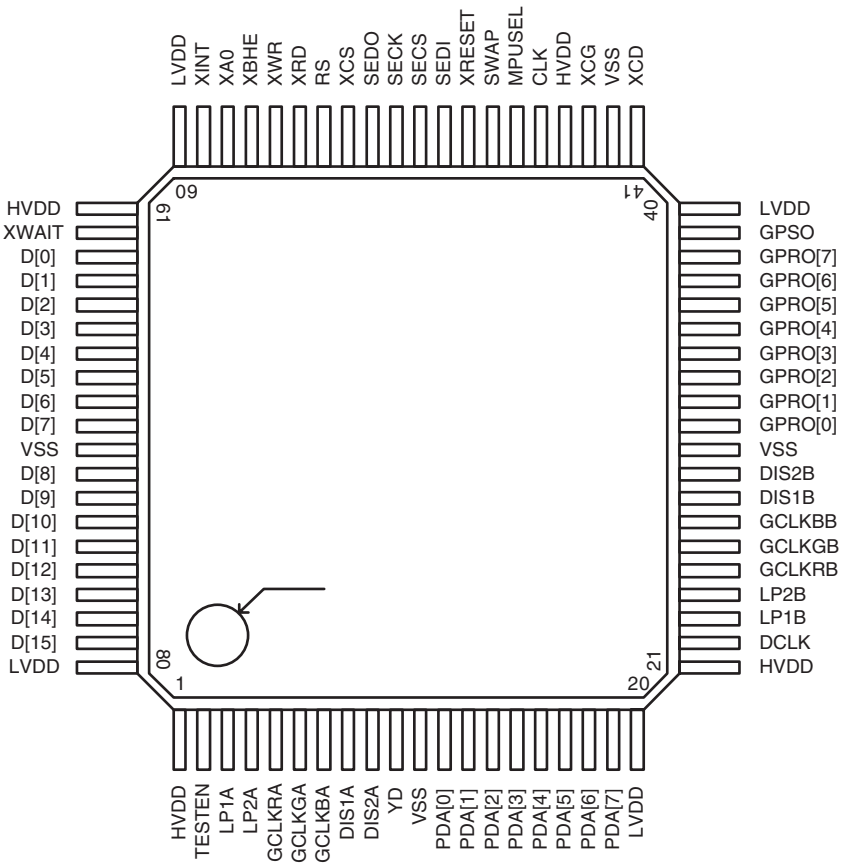


● **Pin Layout**

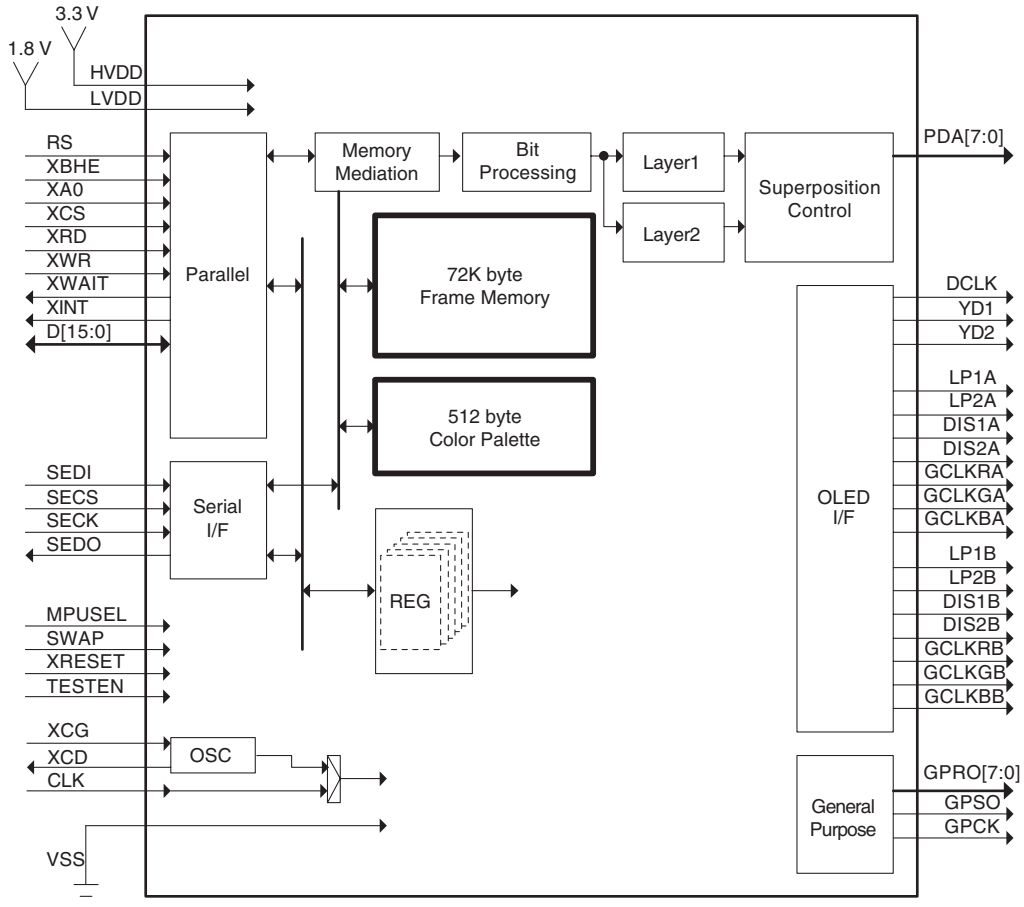


S1D13702F00A100

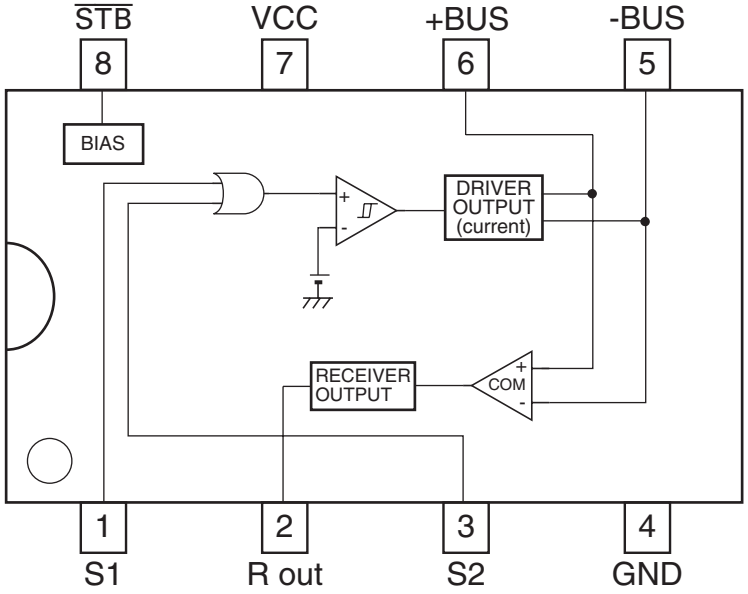
● Pin Layout


LVDD XINT XA0 XBHE XWR XRD RS XCS SEDO SECK SECS SEDI XRESET SWAP MPUSEL CLK HVDD XCG VSS XCD
HVDD XWAIT D[0] D[1] D[2] D[3] D[4] D[5] D[6] D[7] VSS D[8] D[9] D[10] D[11] D[12] D[13] D[14] D[15] LVDD
LVDD GPSO GPRO[7] GPRO[6] GPRO[5] GPRO[4] GPRO[3] GPRO[2] GPRO[1] GPRO[0] VSS DIS2B DIS1B GCLKBB GCLKGB GCLKRB LP2B LP1B DCLK HVDD
HVDD TESTEN LP1A LP2A GCLKRA GCLKGA GCLKBA DIS1A DIS2A YD VSS PDA[0] PDA[1] PDA[2] PDA[3] PDA[4] PDA[5] PDA[6] PDA[7] LVDD
1
20
21
40
41
60
61
80

● Block Diagram

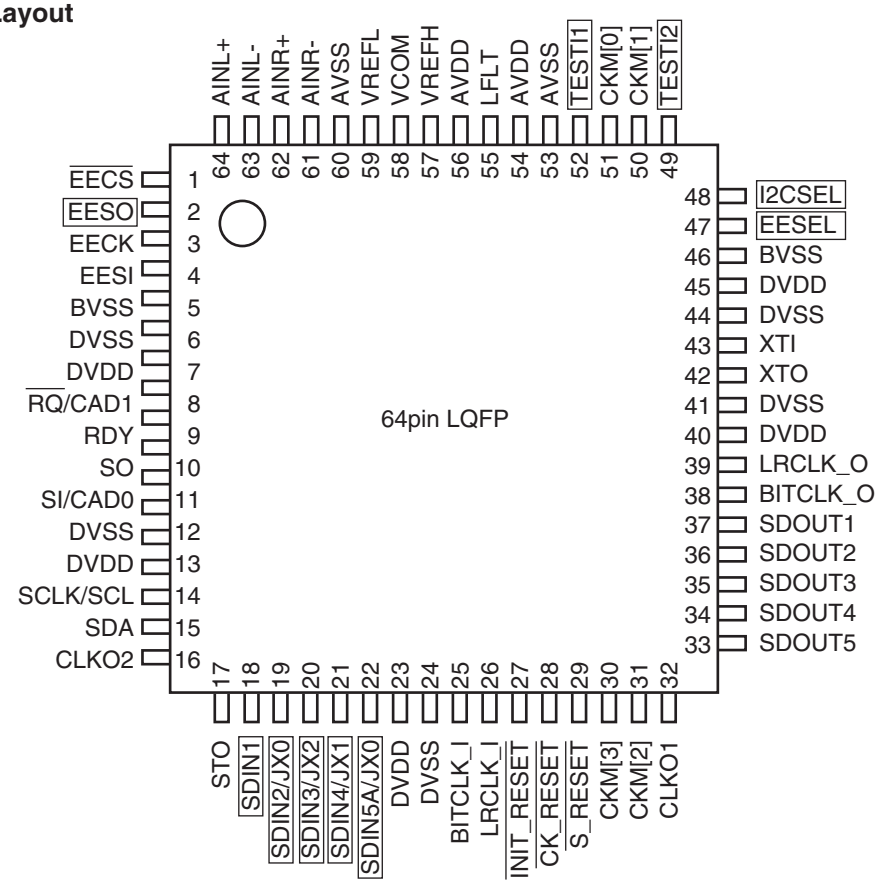


HA12241FP

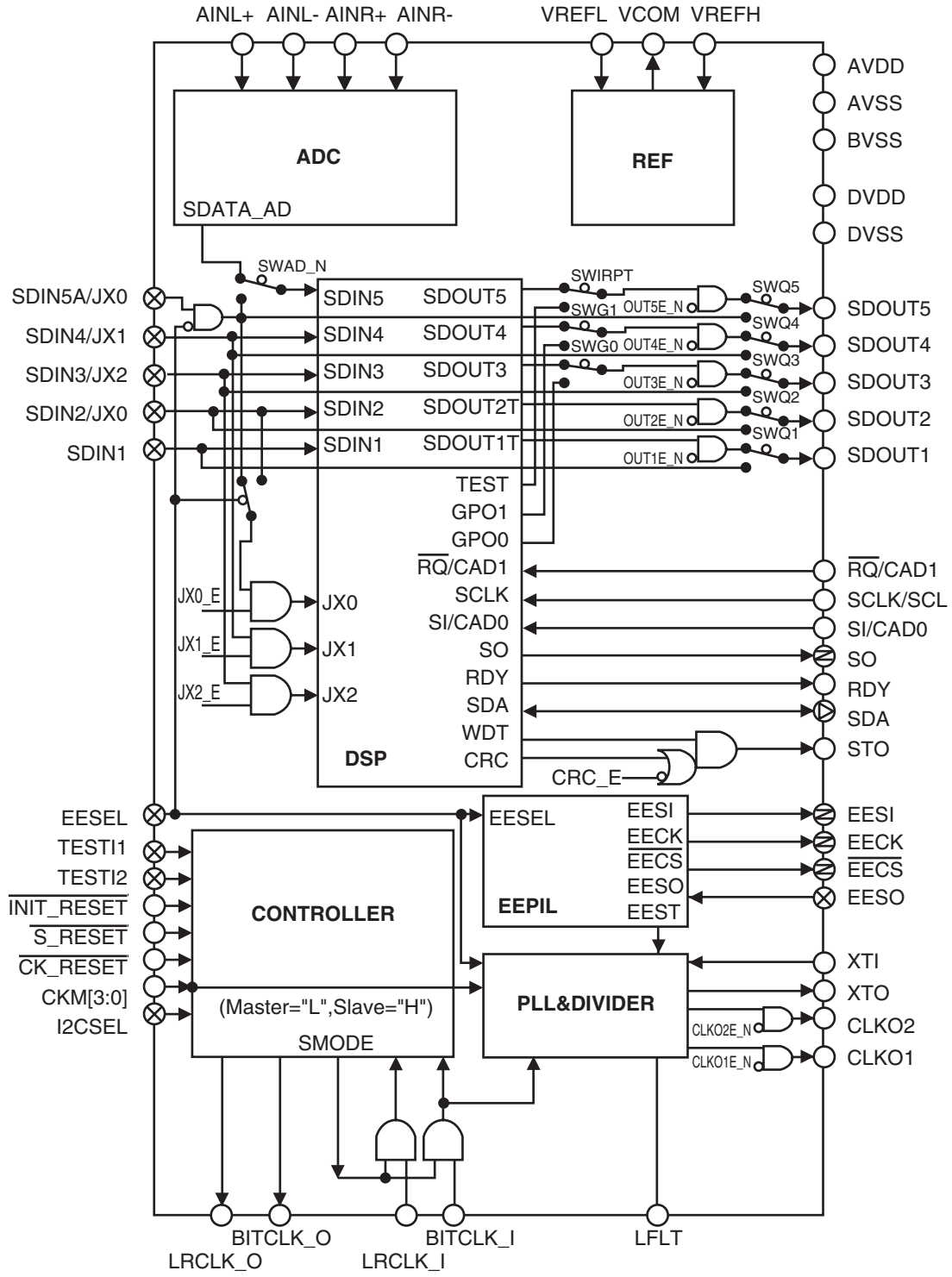


AK7732VT

● **Pin Layout**

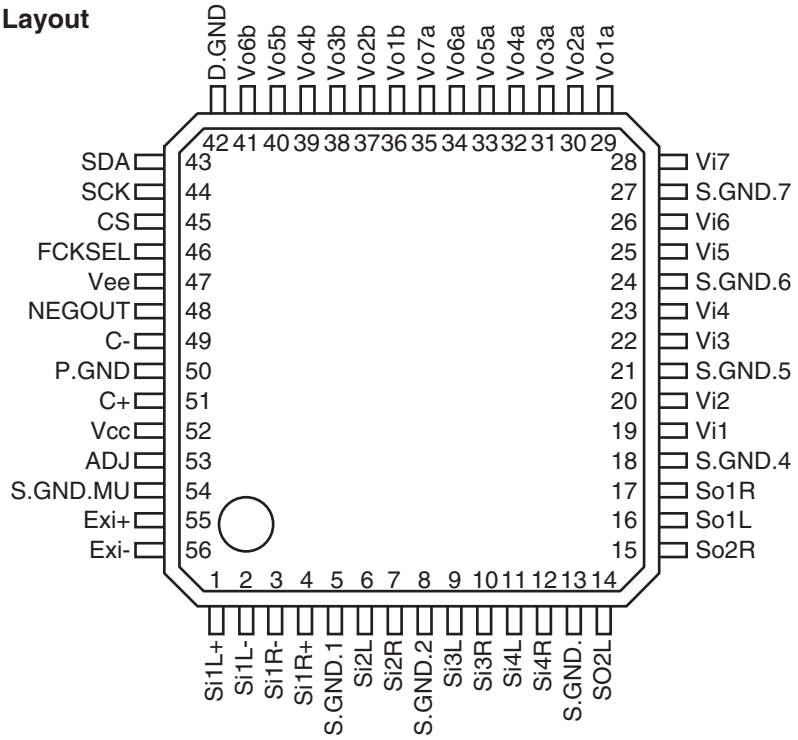


● Block Diagram

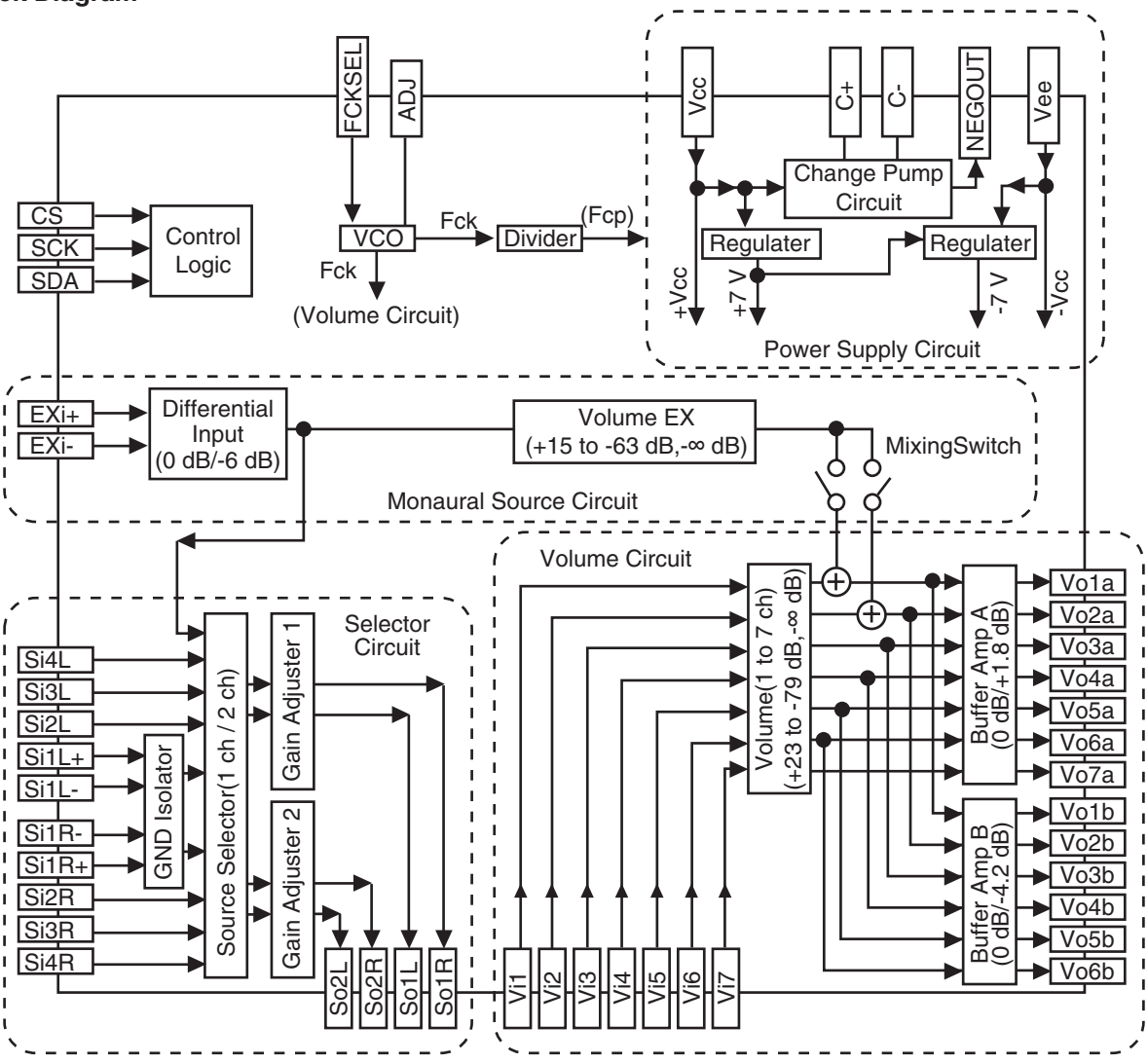


PM9009A

● Pin Layout

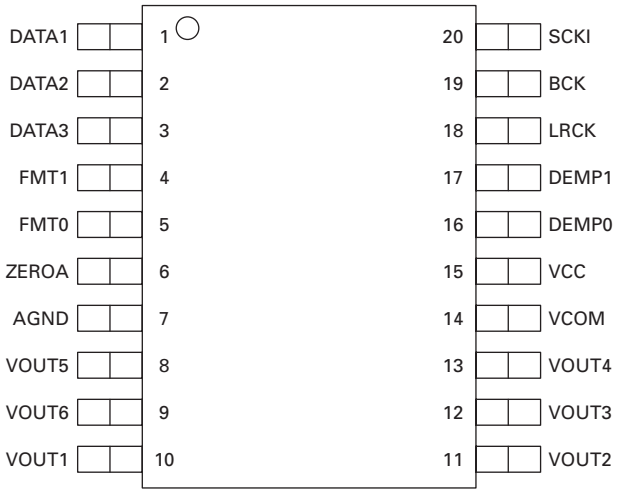


● Block Diagram

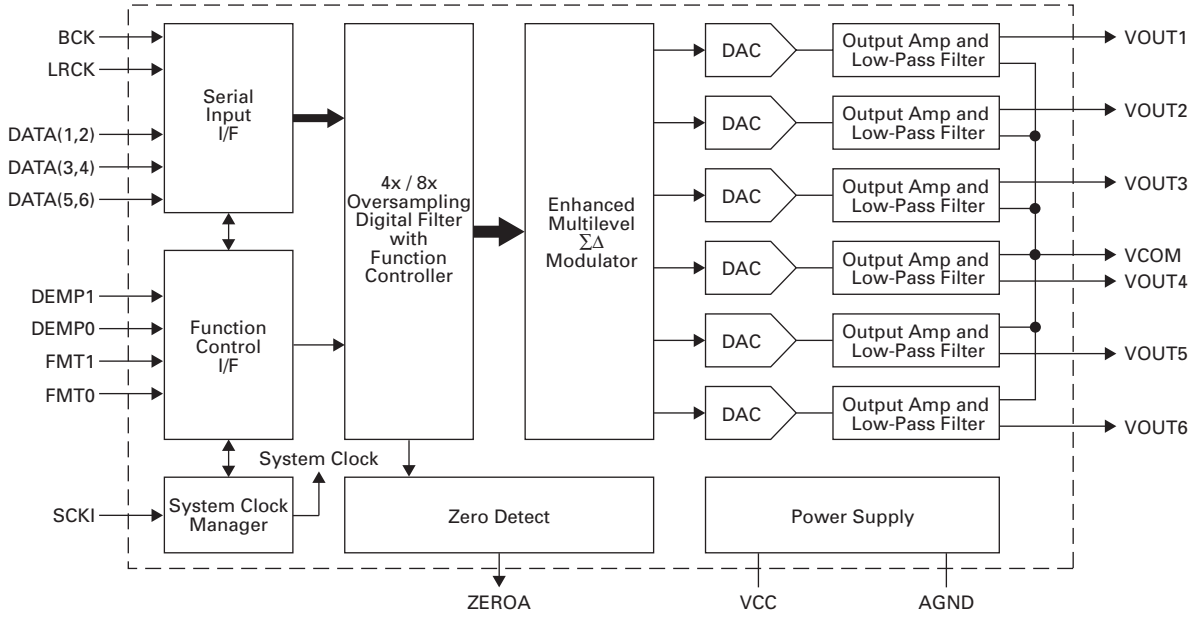


PCM1606EG

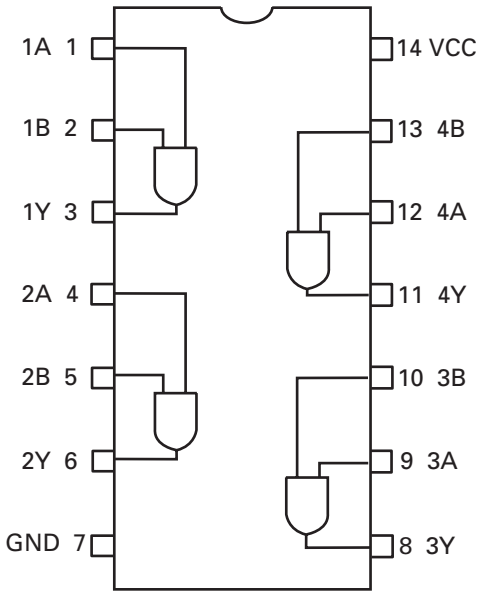
● Pin Layout



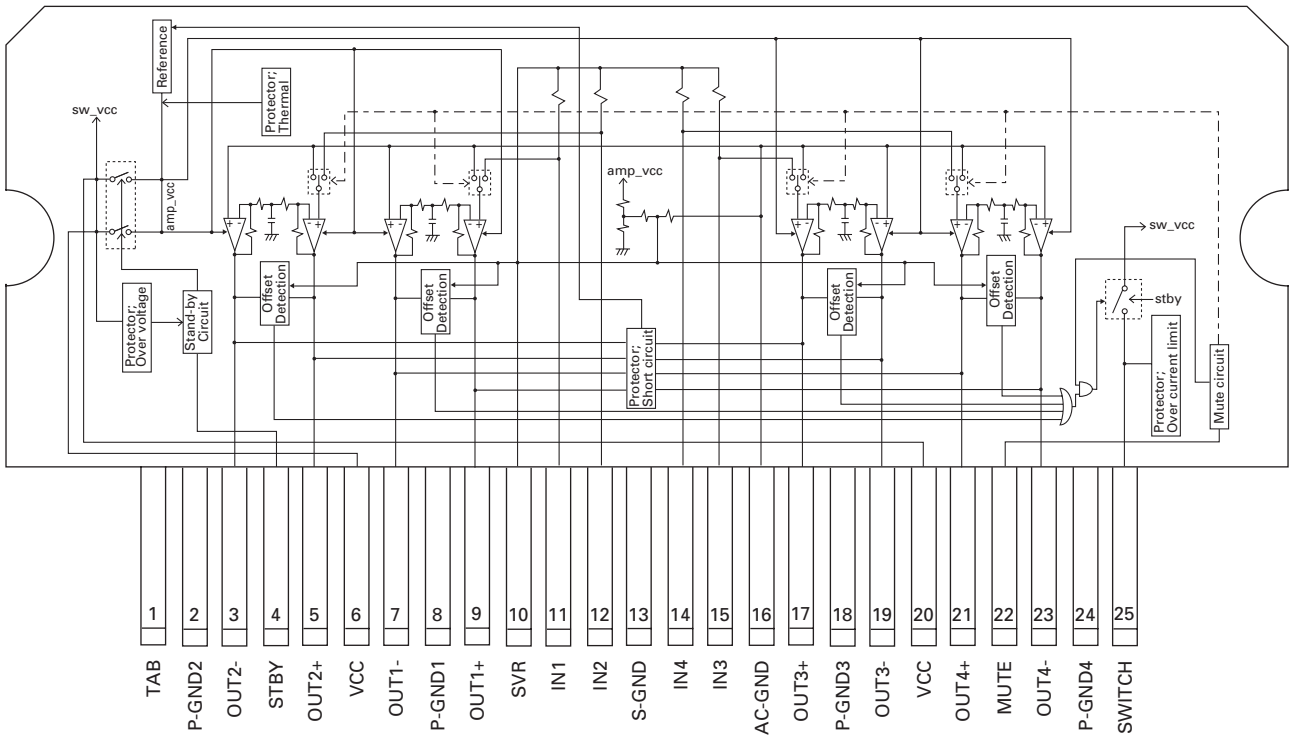
● Block Diagram



TC74VHCT08AFTS1,
TC74VHC08FTS1

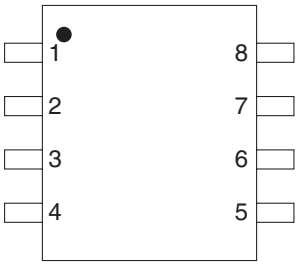


PAL007B

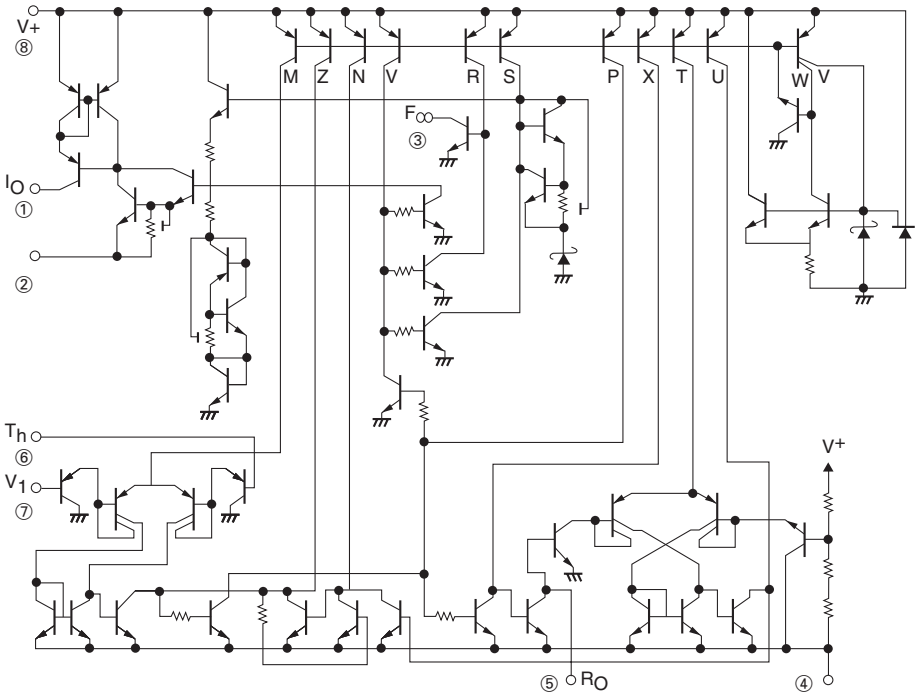


NJM4151M

● Pin Layout

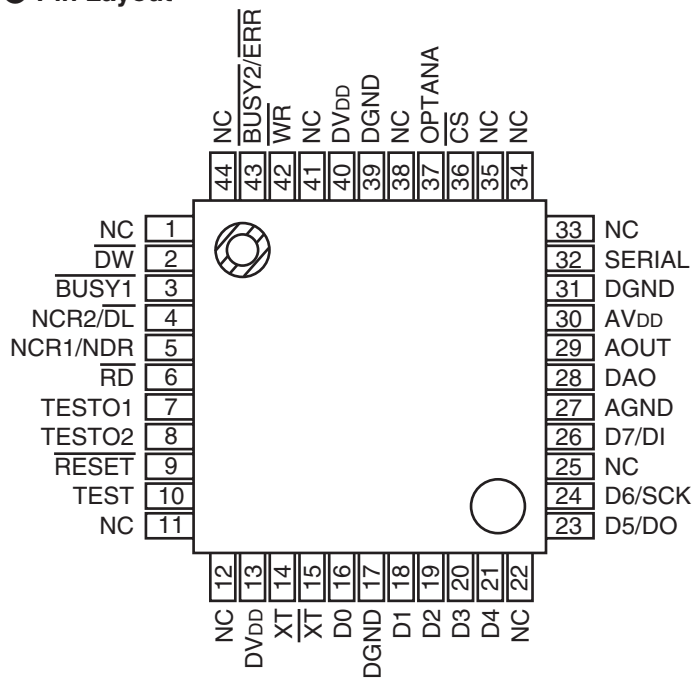


● Block Diagram

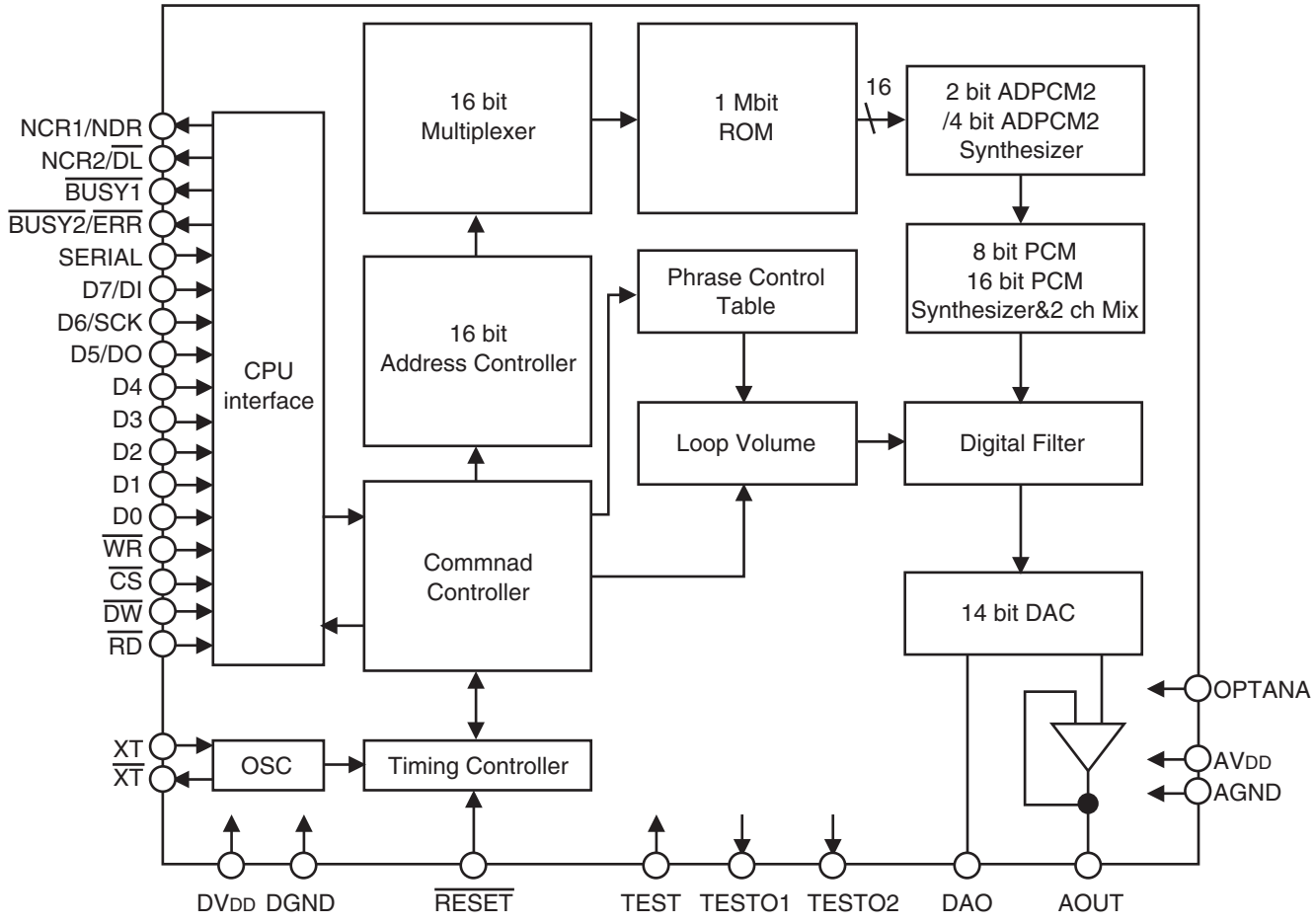


PM8003A

● Pin Layout



● Block Diagram



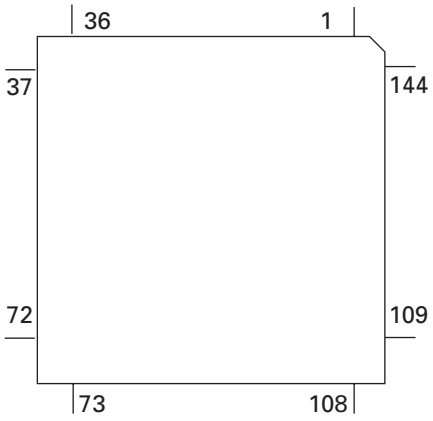
● **Pin Functions(PEG221A, PEG175A)**

Pin No.	Pin Name	I/O	Function and Operation
1	DPDT	O	GRILLE : Data output
2	SWVDD	O	GRILLE : Chip enable output
3	OELPW		OEL power supply output
4	NC		Not used
5	MEMDO	O	External memory : Data output
6	MEMDI	I	External memory : Data input
7	MEMCK	O	External memory : Clock output
8	NC		Not used
9	FLPOPN	O	Flap open operation output
10	FLPCLS	O	Flap close operation output
11	FOPNSW	I	Flap open sense input
12	FCLSSW	I	Flap close sense input
13	FLPPW		Flap motor operation
14	NC		Not used
15,16	BYTE1,2	I	Connect to GND
17	NC		Not used
18	ROMDATA	I/O	ROM correction : Data input/output
19	$\overline{\text{RESET}}$	I	Reset input
20	Xout	O	Clock output
21	Vss		GND
22	Xin	I	Clock input
23	Vcc1		Power supply terminal
24	NMI	I	Not used
25	NC		Not used
26	NC		Not used
27	ROMCK	O	ROM correction : Clock output
28	NC		Not used
29	ROMCS		ROM correction : Chip select output
30	NC		Not used
31	PEE	O	PEE sound output
32	NC		Not used
33	NC		Not used
34	TUNPCE1	O	TUNER : Chip enable output
35	TUNPCE2	O	TUNER : Chip enable output
36	RX	I	IPBUS : Input
37	TX	O	IPBUS : Output
38	BSO	O	P-BUS output
39	VCC1		Power supply terminal
40	BSI	I	P-BUS input
41	VSS		GND
42	BSCK	O	P-BUS clock output
43	NC		Not used
44	NC		Not used
45	NC		Not used
46	NC		Not used
47	NC		Not used
48	NC		Not used
49	TUNPDI	I	TUNER : PLL communication
50	TUNPDO	O	TUNER : Data output(PLL)
51	TUNPCK	O	TUNER : Clock output(PLL)
52	AUIWR	O	AUI : Write signal output
53	AUICS	O	AUI : Chip select output
54	AUISDO	O	AUI : Data output
55	AUISCK	O	AUI : Serial clock output
56	AUIRST	O	AUI : Reset output
57	VSS		GND
58	MUTE	O	System mute output

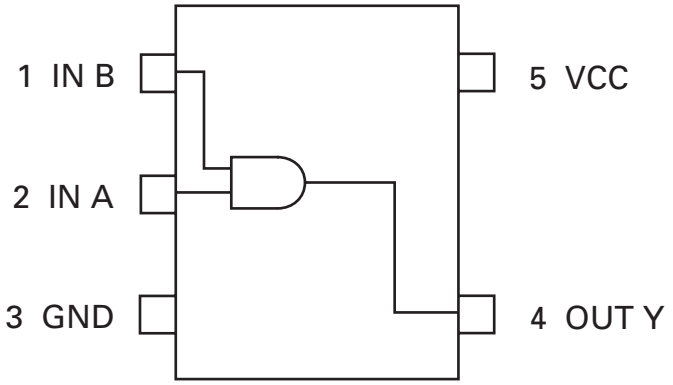
Pin No.	Pin Name	I/O	Function and Operation
59	VCC		Power supply terminal
60	EVOLCS	O	EVOL : Chip select output
61	FCKSEL	O	EVOL : Freguency select output
62	PCL	O	Output for clock adjustment
63	AUIBUSY	I	AUI : Busy input
64	IPPW	O	IPBUS : Driver power supply control output
65	ASENBO	O	IPBUS : Slave ACC sense output
66	MICSENS	I	Microphone sense input
67	AUIMUTE	O	AUI : Mute output
68	NC		Not used
69	DSPRAMCLR	O	DSP : RAM clear request output
70	DSPDRDY	I	DSP : Data write ready input
71	DSPIRST	O	DSP : Reset output
72	CKRST	O	DSP : Clock reset output
73	DSPRST	O	DSP : System reset output
74	VCC		Power usupply terminal
75	DSPRQ	O	DSP : Interface request output
76	VSS		GND
77	SMODE	O	Mode select output H : Master L : Slave
78	BTHF_AEQ	O	Source select output H : AUTO EQ L : Bluetooth H/F
79	$\overline{\text{BRSQ}}$	I	P-BUS : Service request input
80	$\overline{\text{BRST}}$	O	P-BUS : Reset output
81	$\overline{\text{BRXEN}}$	I/O	P-BUS : Reception enable input/output
82	LRCKOK	I	LR clock OK information input
83	RST2	O	CD reset output
84	MCKRQ	I	Master clock request input
85	NC		Not used
86	MEMCS	O	External memory : Chip select output
87	MEMWP	O	External memory : Write protect output
88	DSPIN	I	DSP : Data input
89	DSPCK	I/O	DSP : Clock input/output
90	DSPOUT	O	DSP : Data output
91	VCC		Power supply terminal
92	AMPPW	O	Amp power supply control output
93	VSS		GND
94	NC		Not used
95	NC		Not used
96	NC		Not used
97	NC		Not used
98	DALMON	O	For consumption current reduction output
99	SYSPW	O	System power control output
100	DSPPW	O	DSP : Power control output
101,102	NC		Not used
103	$\overline{\text{ASENS}}$	I	ACC sense input
104	$\overline{\text{BSENS}}$	I	Back up sense input
105	ISENS	I	Illumination sense input
106	NC		Not used
107	KEYD	I	Wired remote control key input
108	MODEL	I	Model select select input
109	NC		Not used
110	NC		Not used
111	ILMPW	O	Illumination output
112	FLPILM	O	Illumination output inside flap
113-122	NC		Not used
123	TELIN	I	Mobile phone mute input
124	ROT1	I	Rotary encoder pulse input
125	ROT0	I	Rotary encoder pulse input

Pin No.	Pin Name	I/O	Function and Operation
126	TESTIN	I	Test program input
127-129	NC		Not used
130	VSS		GND
131	NC		Not used
132	VCC		Power supply terminal
133	NC		Not used
134	BATIND	I	Battery indicator input
135	KEYAD	I	Wired remote control analog voltage input
136	GAUGE		Gauge input
137	$\overline{\text{DSENS}}$	I	Detach sense input
138	NC		Not used
139	ASLIN	I	ASL input
140	AVSS		A/D converter ground
141	SL	I	TUNER : Signal level input
142	VREF		A/D converter reference voltage
143	AVCC		A/D converter power supply input terminal
144	KYDT	I	GRILLE : Data input

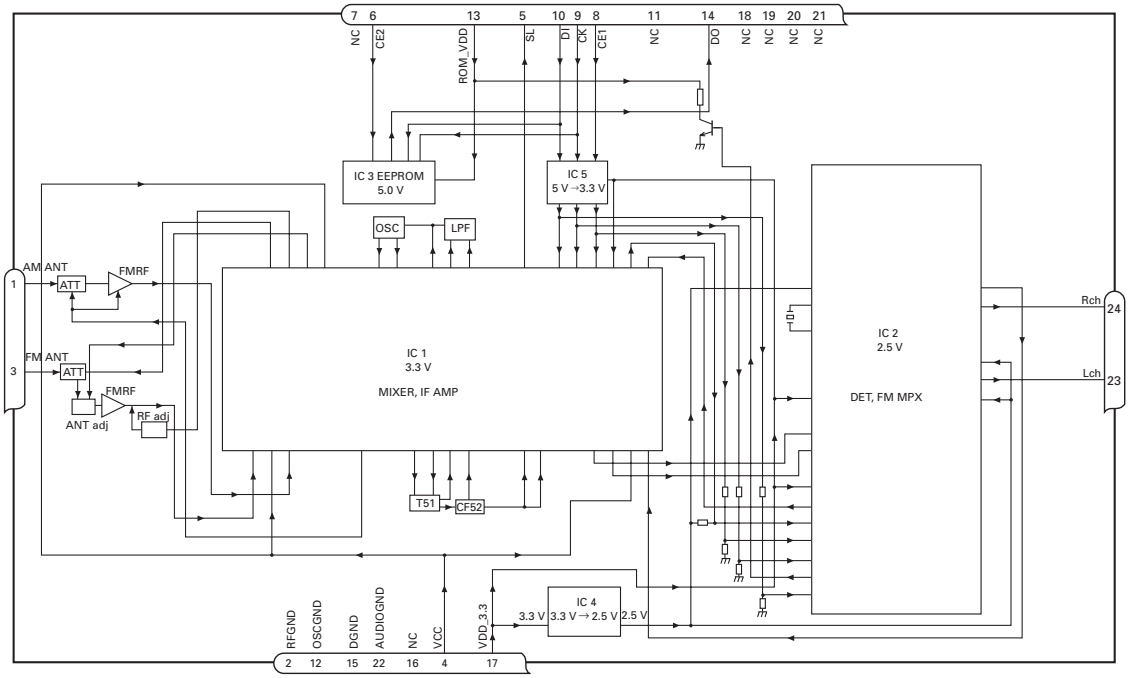
PEG221A(DEH-P780MP/XN/UC, DEH-P7800MP/XN/UC)
PEG175A(DEH-P8850MP/XN/ES)



TC7SH08FUS1

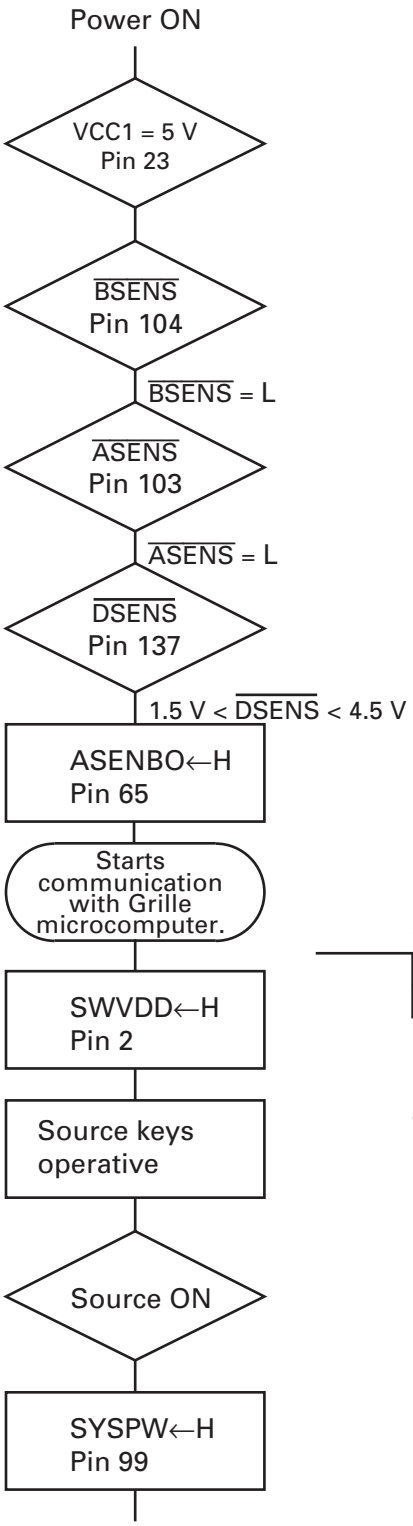


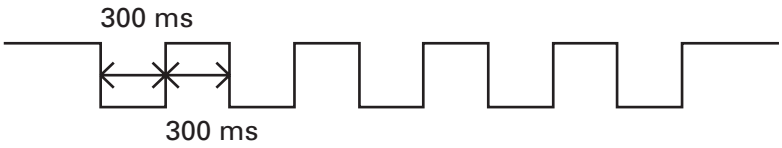
● FM/AM Tuner Unit


7 6 13 5 10 9 8 11 14 18 19 20 21
NC CE2 ROM_VDD SL DI CK CE1 NC DO NC NC NC NC
IC 3 EEPROM 5.0 V
IC 5 5 V→3.3 V
OSC
LPF
AM ANT
FM ANT
ATT
FMRF
ANT adj
RF adj
IC 1 3.3 V MIXER, IF AMP
IC 2 2.5 V DET, FM MPX
Rch
Lch
T51
CF52
IC 4 3.3 V → 2.5 V
3.3 V
2.5 V
RFGND OSCGND DGND AUDIOGND NC VCC VDD_3.3
2 12 15 22 16 4 17

No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7 μH. (LAU type inductor)A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the hum of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75 Ω Surge absorber(DSP-201M-S00B)is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4 V± 0.3 V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	NC		non connection	Not used
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	NC		non connection	Not used
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3 V ± 0.2 V
18	NC		non connection	Not used
19	NC		non connection	Not used
20	NC		non connection	Not used
21	NC		non connection	Not used
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

7.3 OPERATIONAL FLOW CHART

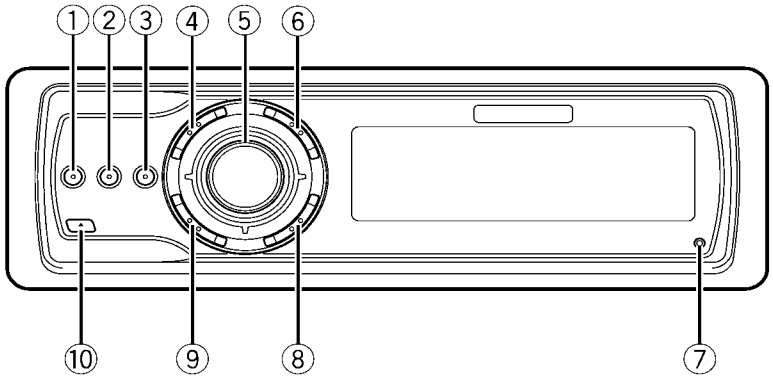




In case of the above signal, the communication with Grille microcomputer may fail.
If the time interval is not 300 msec, the oscillator may be defective.

Completes power-on operation.
(After that, proceed to each source operation)

8. OPERATIONS



Head unit

① EQ button
Press to select various equalizer curves.

② DISPLAY button
Press to select different displays.

③ CLOCK button
Press to change to the clock display.

④ SW button
Press to select the subwoofer setting menu.

⑤ MULTI-CONTROL
Move to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.
Turn to increase or decrease the volume.

⑥ LIST button
Press to display the disc title list, track title list, folder list, file list or preset channel list depending on the source.

⑦ RESET button
Press to reset the microprocessor.

⑧ BAND button
Press to select among three FM bands and one AM band and to cancel the control mode of functions.

⑨ SOURCE button
This unit is turned on by selecting a source.
Press to cycle through all the available sources.

⑩ EJECT button
Press to eject a CD from your built-in CD player.
Press and hold to open or close the front panel.

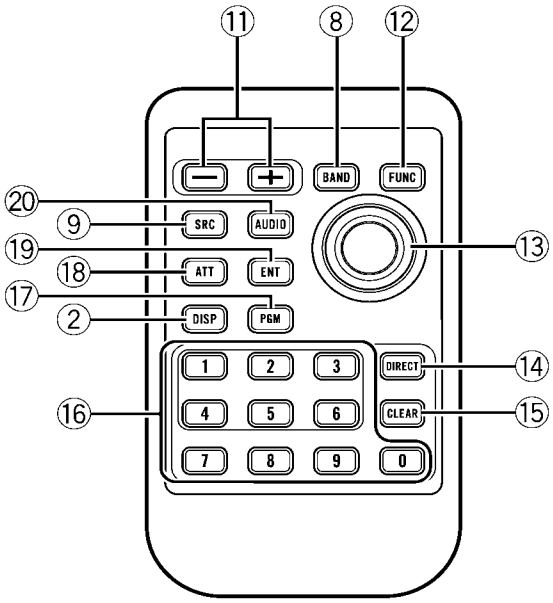
Remote control

Operation is the same as when using the buttons on the head unit.

⑪ VOLUME buttons
Press to increase or decrease the volume.

⑫ FUNCTION button
Press to select functions.

⑬ Joystick
Move to perform manual seek tuning, fast forward, reverse and track search controls.
Also used for controlling functions.
Functions are the same as **MULTI-CONTROL** except for volume control.



⑭ **DIRECT button**
Press to directly select the desired track.

⑮ **CLEAR button**
Press to cancel the input number when **0–9** are used.

⑯ **0–9 buttons**
Press to directly select the desired track, preset tuning or disc. Buttons **1–6** can operate the preset tuning for the tuner or disc number search for the multi-CD player.

⑰ **PGM button**
Press to operate the preprogrammed functions for each source.

⑱ **ATT button**
Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

⑲ **ENTERTAINMENT button**
Press to change to the entertainment display.

⑳ **AUDIO button**
Press to select various sound quality controls. ■

Turning the unit on

● **Press SOURCE to turn the unit on.**

When you select a source, the unit is turned on.

Selecting a source

You can select a source you want to listen to. To switch to the built-in CD player, load a disc in the unit.

● **Press SOURCE to select a source.**

Press **SOURCE** repeatedly to switch between the following sources:

XM tuner—SIRIUS tuner—Tuner—Television—DVD player/Multi-DVD player—Built-in CD player—Multi-CD player—iPod—External unit 1—External unit 2—AUX1—AUX2

Notes

- In the following cases, the sound source will not change:
  - — When there is no unit corresponding to the selected source connected to this unit.
  - — When there is no disc in the unit.
  - — When there is no disc in the DVD player.
  - — When there is no magazine in the multi-CD player.
  - — When there is no magazine in the multi-DVD player.
  - — When the AUX (auxiliary input) is set to off.
- External unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this unit. Two external units can be controlled by this unit. When two external units are connected, the allocation of them to external unit 1 or external unit 2 is automatically set by this unit.
- When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off.

Loading a disc

1 Press EJECT to open the front panel.

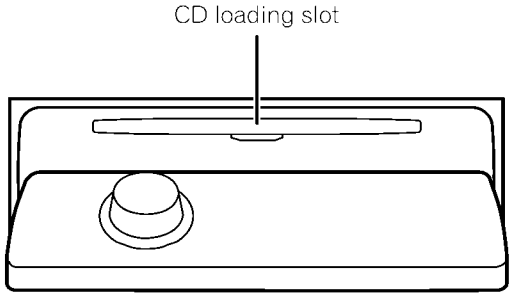
CD loading slot appears.

■ After a CD has been inserted, press **SOURCE** to select the built-in CD player.

2 Insert a CD into the CD loading slot.

Front panel is closed automatically, and playback will start.

- With jacket art function on, jacket arts on CD-ROM disc are automatically read in this unit when the disc is inserted. To cancel reading jacket arts, press **BAND**.



■ You can eject a CD by pressing **EJECT**.

Notes

- The built-in CD player plays one standard, 12-cm or 8-cm CD at a time. Do not use an adapter when playing 8-cm CDs.
- Do not insert anything other than a CD into the CD loading slot.
- There is sometimes a delay between starting up CD playback and the sound being issued. When being read, **Format read** is displayed.

- If you cannot insert a disc completely or if after you insert a disc the disc does not play, check that the label side of the disc is up. Press **EJECT** to eject the disc, and check the disc for damage before inserting it again.
- When the CD loading or ejecting function does not operate properly, you can eject the CD by pressing and holding **EJECT** while opening the front panel.
- If an error message such as **ERROR-11** is displayed. ▣

Adjusting the volume

● **Use MULTI-CONTROL to adjust the sound level.**

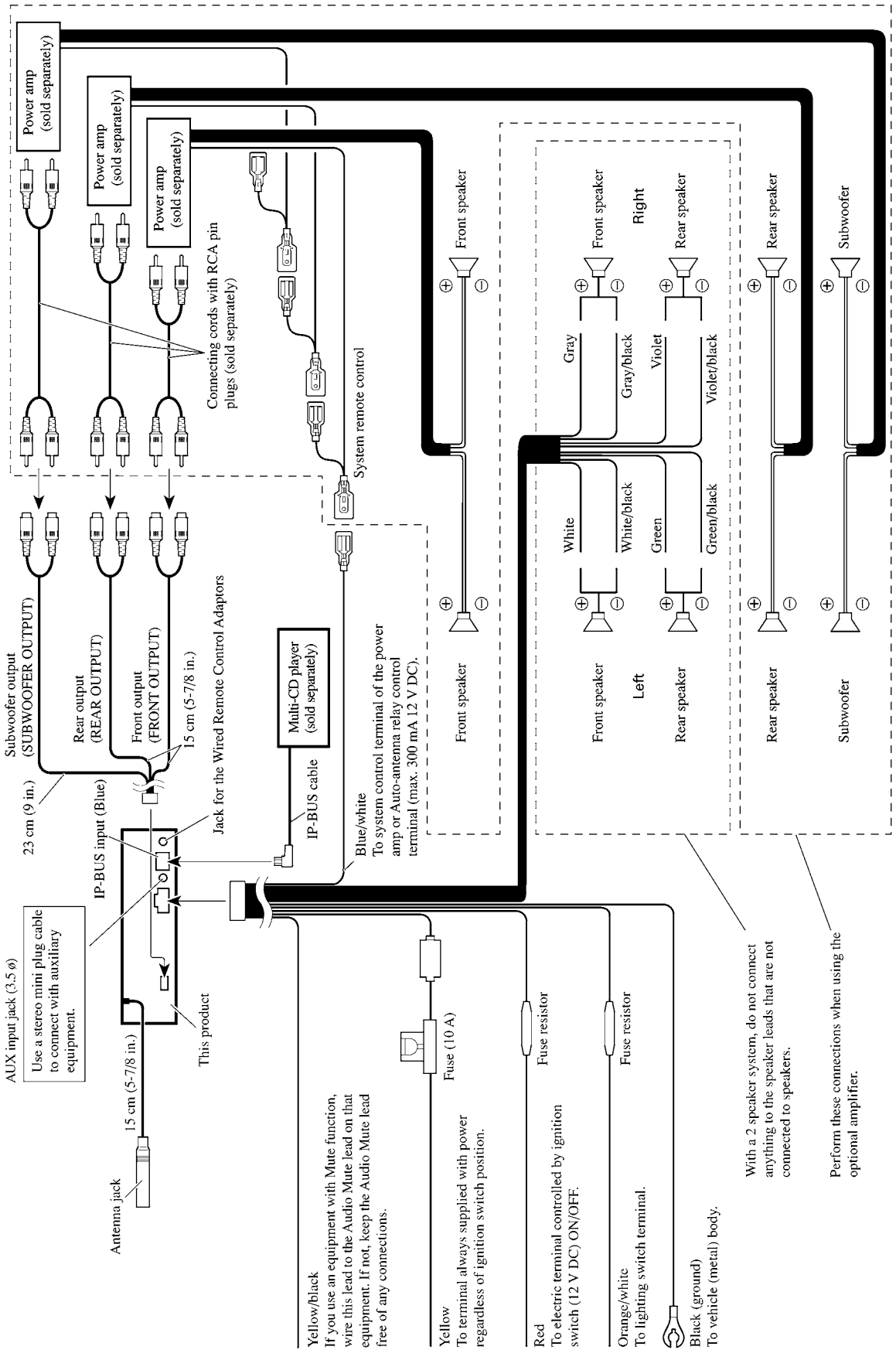
With the head unit, turn **MULTI-CONTROL** to increase or decrease the volume.

With the remote control, press **VOLUME** to increase or decrease the volume. ▣

Turning the unit off

● **Press SOURCE and hold until the unit turns off.** ▣

Connection Diagram


Power amp (sold separately)
Power amp (sold separately)
Power amp (sold separately)
Connecting cords with RCA pin plugs (sold separately)
System remote control
Front speaker
Front speaker
Right
Rear speaker
Rear speaker
Subwoofer
Gray
Gray/black
Violet
Violet/black
White
White/black
Green
Green/black
Front speaker
Front speaker
Left
Rear speaker
Rear speaker
Subwoofer
Subwoofer output (SUBWOOFER OUTPUT)
Rear output (REAR OUTPUT)
Front output (FRONT OUTPUT)
15 cm (5-7/8 in.)
23 cm (9 in.)
Jack for the Wired Remote Control Adaptors
Multi-CD player (sold separately)
IP-BUS cable
Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal (max. 300 mA 12 V DC).
IP-BUS input (Blue)
AUX input jack (3.5 ø)
Use a stereo mini plug cable to connect with auxiliary equipment.
15 cm (5-7/8 in.)
This product
Antenna jack
Yellow/black
If you use an equipment with Mute function, wire this lead to the Audio Mute lead on that equipment. If not, keep the Audio Mute lead free of any connections.
Yellow
To terminal always supplied with power regardless of ignition switch position.
Fuse (10 A)
Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Fuse resistor
Orange/white
To lighting switch terminal.
Fuse resistor
Black (ground)
To vehicle (metal) body.
With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
Perform these connections when using the optional amplifier.

● Jigs List

Name	Jig No.	Remarks
Test Disc	TCD-782	Checking the grating
L.P.F.		Checking the grating (Two pieces)

● Grease List

Name	Jig No.	Remarks
Grease	GEM1024	CD Mechanism Module
Grease	GEM1045	CD Mechanism Module

Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

Portions to be cleaned	Cleaning tools
CD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

Portions to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008